Summary of CTDOT Performance Measures

2010 QUARTER 2 (APRIL 1 TO JUNE 30)

Revised: 11/03/2010

Legend

Status
- ▲ Data Updated & Page Revised
- ↻ Page Revised
- *New* New Measure

Performance Since Last Data Update
- ↗ Performance is Improving
- ≈ Performance Remains Stable
- ↘ Performance is Declining

ID	Status	Measure	Target Value	2010 Quarter 1 (1/1/10 to 3/31/10) Report Date: 7/1/2010	2010 Quarter 2 (4/1/10 to 6/30/10) Report Date: 10/1/2010	Performance Since Last Data Update	Target Met
1. Safety & Security (SS)							
1.01-0	↻	**Rate of Highway Fatalities**	Less than or equal to 1.0 per 100 million vehicle miles traveled (VMT)	0.83	0.83	↗	✓
1.01-1	↻	Rate of Highway Fatalities	Less than or equal to 7.7 per 100,000 population	7.5	7.5	↗	✓
1.02-0	▲	**Percent of Seat Belt Usage**	90% Seat Belt Usage	86%	**88%**	↗	
1.04-0	▲	**Number of CHAMP Motorist Assists**	Maintain ability to assist at least 20,000 motorists per year (Approx 5,000 per quarter)	4,516	**6,506**	↗	✓
2. Preservation (PR)							
2.01-0	↻	**Percent of Roads with Good Ride Quality**	Increase Percentage of NHS Roads with Good Ride Quality (IRI of less than 95 inches per mile)	44%	44%	↗	✓
2.02-0	▲	**Number of Bridge Work Items Completed**	Maximize Completion of Work Items	266	**304**	↗	N/A
2.02-1	▲	Number of Bridge Work Items Completed	Strive for Zero Growth in Backlog During the First Year of the New Bridge Maintainence Initiative	3,629	**3,521**	↗	✓
2.03-0		**Percent of Roadway Bridges Maintained by CTDOT in Good Condition**	Increase Percentage of Bridges in Good Condition.	34%	34%	↘	
2.04-0	▲	**Mean Distance Between Failures (Rail)**	Locomotive—35,000 mi	29,674	**27,970**	↘	
2.04-1	▲	Mean Distance Between Failures (Rail)	Coach-260,000 mi	281,140	**371,192**	↗	✓
2.04-2	▲	Mean Distance Between Failures (Rail)	EMU M2-80,000 mi.	122,964	122,919	≈	✓
2.04-3	▲	Mean Distance Between Failures (Rail)	EMU M4-65,000mi	87,972	**40,337**	↘	
2.04-4	▲	Mean Distance Between Failures (Rail)	EMU M6-60,000mi.	71,166	**92,905**	↗	✓
2.05-0	▲	**Average Miles Between Road Calls (Buses)**	5000 Miles Between Road Calls	4,782	**4,008**	↘	
2.06-0		**Average Age of Bus Fleet**	Average Fleet Age of 6.0 years (State)	7.6	7.6	↗	
2.06-1		Average Age of Bus Fleet	Average Fleet Age of 6.0 years (Transit District)	5.8	5.8	↗	✓
2.07-0		**Percent of Airport Pavement Rated Good or Excellent**	100% Good or Excellent (General Aviation)	90%	90%	≈	
2.07-1		Percent of Airport Pavement Rated Good or Excellent	100% Good or Excellent (Bradley Int.)	100%	100%	≈	✓
3. Efficiency & Effectiveness (EE)							
3.01-0	▲	**Number of Rail Passengers**	9,193,656— NHL	8,530,501	**9,535,298**	↗	✓
3.01-1	▲	Number of Rail Passengers	145,349 — SLE	134,451	**146,211**	↗	✓
3.02-0	▲	**Percent of Rail On-Time Performance**	97.0% — NHL	97%	**98%**	↗	✓
3.02-1	▲	Percent of Rail On-Time Performance	95.0% — SLE	97%	**93%**	↘	
3.03-0	▲	**Number of Bradley International Airport Passengers**	Maintain or Exceed Value from Same Quarter in Previous Year	1,178,055	**1,372,015**	↗	
3.04-0	▲	**Revenue Generated from Bradley International Airport Parking**	Maintain or Exceed Value from Same Quarter in Previous Year	$4,655,910.00	**$4,921,663.00**	↗	✓
3.05-0	▲	**Cost Savings from Photolog Usage**	$500,000 per quarter ($2,000,000 per year)	$324,165.00	**$360,864.00**	↗	
3.07-0	↻	**Percent of Rights-of-Way Purchases Attained by Agreement**	Greater than 90 percent per year	91%	**88%**	↘	
3.08-0	▲	**Number of CTTransit Passenger Trips**	6,250,000 passenger trips per quarter	6,088,375	**6,443,459**	↗	✓
4. Quality of Life (QL)							
4.01-0		**Amount of Recycled Material Used in Projects**	Maximize Recycling and Reuse of Materials (Tons of Demolition Debris)	482,710	482,710	↗	N/A
4.01-1		Amount of Recycled Material Used in Projects	Maximize Recycling and Reuse of Materials (Tons of Wood)	591	591	↘	N/A
4.01-2		Amount of Recycled Material Used in Projects	Maximize Recycling and Reuse of Materials (Tons of Steel)	1,140	1,140	↗	N/A
4.02-0	▲	**Percent of Road Network with Traffic Volumes Greater than Capacity**	Reduce congestion throughout the state	8.79%	**8.80%**	↘	
4.03-0	▲	**Average Highway Incident Duration Time**	Cars:< 45 minutes	48	**39**	↗	✓
4.03-1	▲	Average Highway Incident Duration Time	Jackknifed Tractor Trailers:< 180 minutes (3 hours)	84	**211**	↘	
4.03-2	▲	Average Highway Incident Duration Time	Overturned Tractor Trailers: < 300 Minutes (5 hours)	543	**183**	↗	✓
4.04-0	▲	**Average Highway Incident Response Time**	5.00 minutes (or less)	2.28	**3.01**	↘	✓
4.05-0	▲	**Percent of Funds Expended for Bicycle/ Pedestrian Access**	Expend at Least One Percent of Total Funds Received, on Facilities that Improve Bicycle and Pedestrian Access	1.9%	**1.1%**	↘	✓
5. Accountability & Transparency (AT)							
5.01-0	▲	**Percent of Agreements Executed in Under 60 Days**	Increase Percent of Agreements Executed in Under 60 Days	59%	**47%**	↘	
5.02-0	▲	**Percent of Construction Contracts Awarded within 60 Days of Bid Opening**	100% awarded within 60 days	92%	**86%**	↘	
5.03-0	▲	**Number of Project Closeouts**	250 projects closed in SFY 2010	255	**286**	↗	✓
5.04-0		**CT RECOVERY Percent Funds Obligated**	Highways 50% by 7/1/09, 100% by 3/2/10	100% 03/02/10	100%	≈	✓
5.04-1		CT RECOVERY Percent Funds Obligated	Transit 50% by 9/1/09, 100% by 3/5/10	100% 03/05/10	100%	≈	✓
5.05-0	▲	**CT RECOVERY Percent Dollars Expended**	100 % ($455 million)	21%	**27%**	↗	
5.06-0	▲	**CT RECOVERY Number of Jobs Created/Sustained**	Increase Jobs Created/Sustained	10,848	**16,158**	↗	✓
5.07-0	▲	**CT RECOVERY Percent of Stimulus Projects Completed On-Time**	Maximize % of Stimulus Proj. Completed On-Time	90%	**93%**	↗	N/A
5.08-0	*New*	**Percent of Construction Contracts Completed within Budget**	Maximize Percent of Construction Contracts Completed within Budget		**69%**	≈	N/A
5.09-0	*New*	**Percent of Construction Contracts Completed on Time**	Maximize Percent of Construction Contracts Completed on Time		**45%**	≈	N/A

Performance Measures

Objective:
Safety and Security

Program:
Highway Safety

Measure:
Rate of Highway Fatalities

Report Date:
October 1, 2010

Data Frequency: Annual

Current Reported Value: *0.83 fatalities per 100 million vehicle miles traveled (VMT)*
7.5 fatalities per 100,000 population

Performance Target Value: *Less than or equal to 1.0 per 100 Million Vehicle Miles Traveled (VMT)*
Less than or equal to 7.7 per 100,000 Population

Source: *Bureau of Policy and Planning*
Mr. Joseph Cristalli

Note: Initial fatality counts published by NHTSA are preliminary as of April 30th for the previous calendar year. Final counts are published one year later, for the same calendar year. (For example, calendar year 2008 data are published initially in April 2009, and finalized in mid 2010.) The latest data set used for this posting, covers the time period from 1/1/2008 through 12/31/2008.

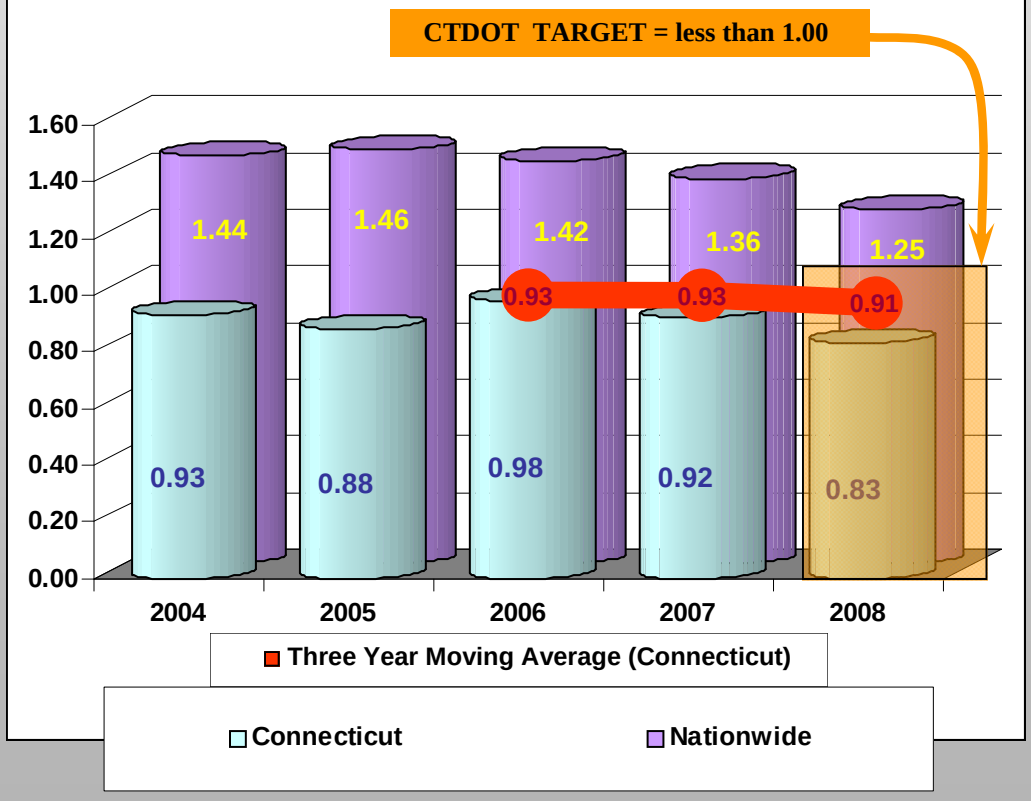
Purpose / Description of measure:

This measure tracks the fatality rate on Connecticut's roadways. By tracking fatality rates, the Department is able to gather information necessary to develop effective programs that ensure the safety and security of the traveling public.

Discussion of trend:

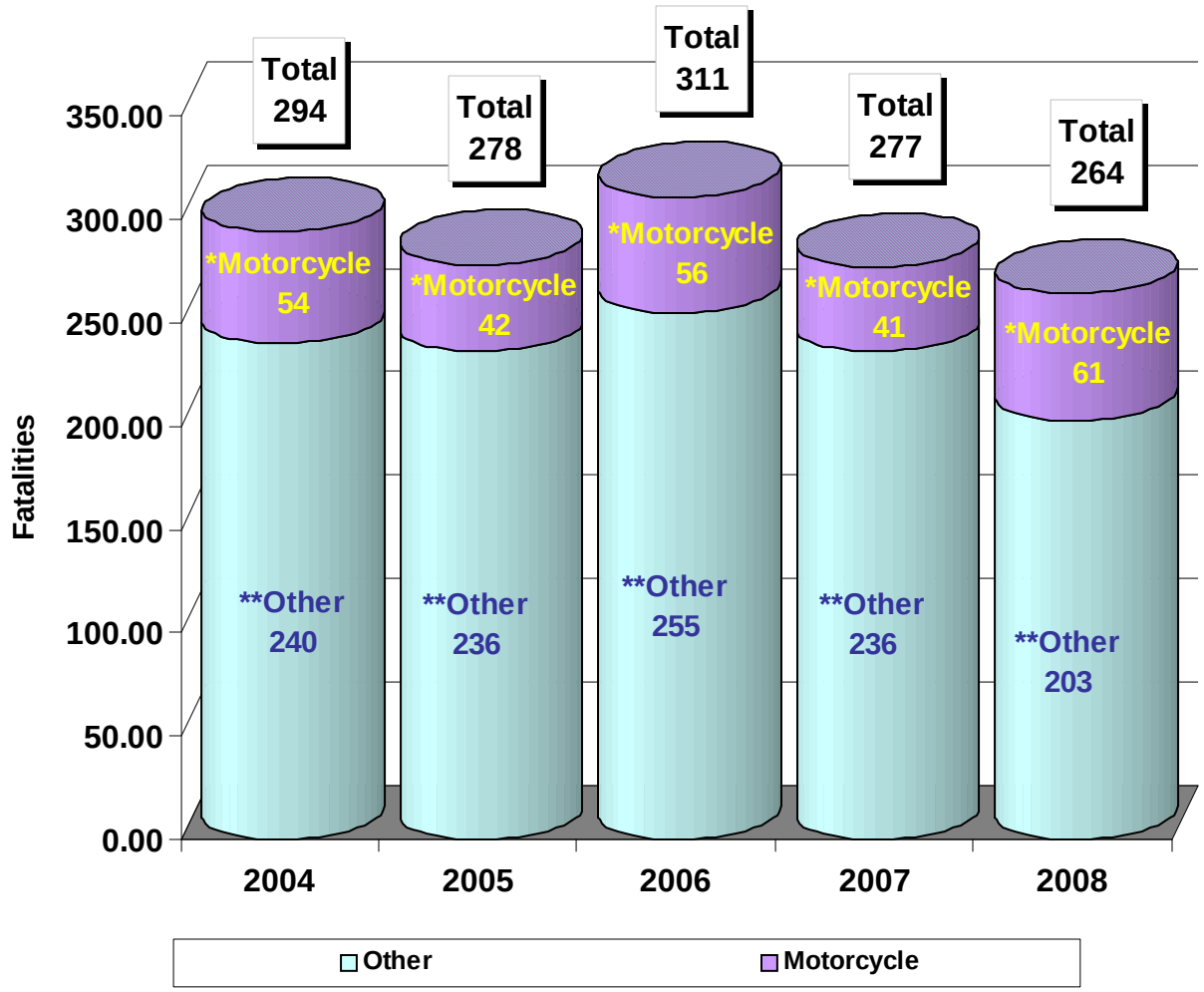
In 2008, Connecticut's fatality rate was 0.83 fatalities per 100 million vehicle miles traveled compared with the national figure of 1.25* fatalities (see Figure 1).
(continued)

Figure 1. *Fatalities Per 100 Million Vehicle Miles Traveled*



*From NHTSA Traffic Safety Facts CT 2004-2008, FARS 2004-2007 Final and FARS 2008 Annual Report File. (http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/9_CT/2008/9_CT_2008.htm)

Figure 2. *Annual Highway Fatalities*



* Includes: Operator and Passenger

** Includes: Driver, Passenger, Pedestrian, Bicyclist

Discussion of trend (continued):

In 2008, there were 248 fatal motor vehicle crashes in which 264 persons were killed. This 264 figure includes operators, passengers, motorcycle operators, pedestrians and cyclists. In 2008, a total of 61 motorcycle operators and passengers were killed on Connecticut roadways, representing 23.1 percent of the state's total traffic fatalities. Based on 94,441 registered motorcycles, the fatality rate per 10,000 registered vehicles was 6.0, a substantial increase from the 2007 rate of 4.8 per 10,000. Preliminary data indicates that this trend will not continue in 2009.

Performance Measures

Objective:
Safety and Security

Program:
Highway Safety

Measure:
Percent of Seat Belt Usage

Report Date:
October 1, 2010

Data Frequency: Annual

Current Reported Value: *88% Seat Belt Usage Rate (Observed)*

Performance Target Value: *90% Seat Belt Usage Rate*

Source: *Bureau of Policy and Planning*
Mr. Joseph Cristalli

Note: Data for this measure, based on sampling, becomes available for reporting annually in September for the current Calendar Year. The latest data set used for this posting covers the time period from 1/1/2010 through 12/31/2010.

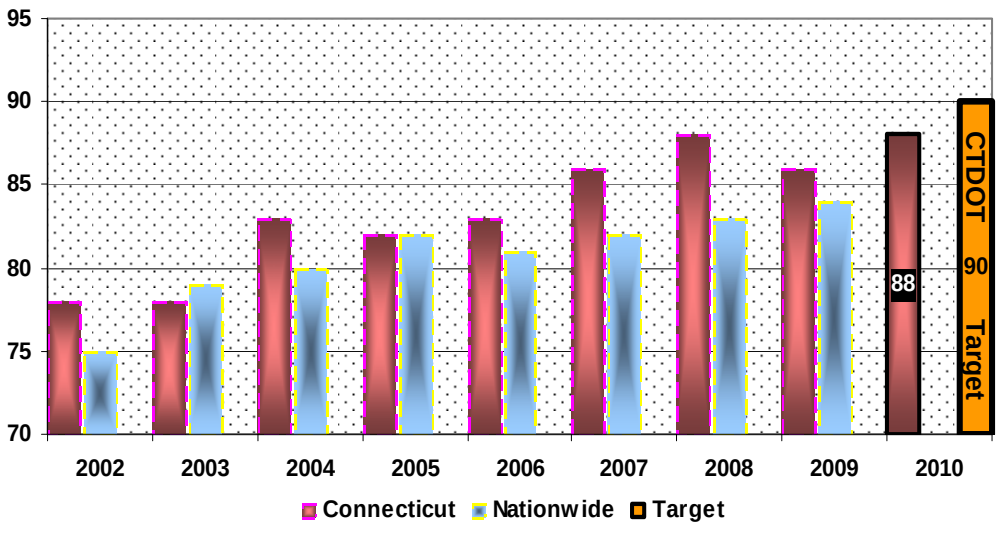
Purpose / Description of measure:

This measure tracks seat belt usage by Connecticut's motorists. Drivers, front seat passengers and all rear seat passengers aged 4 to 16 are required to wear seat belts. Connecticut's primary enforcement law carries a fine of $92 for not wearing a seat belt. When worn correctly, seat belts reduce the risk of fatal injury to front seat occupants by 45-60 percent.

Discussion of trend:

The "Click It or Ticket" program has assisted in increasing seat belt usage in Connecticut. The use of seat belts increased from 78 percent in 2002 to an all time high of 88 percent in 2008 and again in 2010(see Figure 1). Even with a drop to 86 percent in 2009, Connecticut remained above the national average. According to the National Highway Traffic Safety Administration, 14 states had achieved a 90 percent or higher rate of seat belt usage in 2008.

Figure 1. Seat Belt Usage



2010 nationwide Data is not available

Performance Measures

Objective:
Safety and Security

Program:
Customer Service

Measure:
Number of CHAMP Motorist Assists

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *6,506 Motorist Assists (2010 Q2)*

Performance Target Value: *Maintain Ability to Assist at Least 20,000 Motorists per Year*

Source: *Bureau of Highway Operations*
Mr. Harold Decker

Note: Data for this measure becomes available quarterly. The latest data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010).

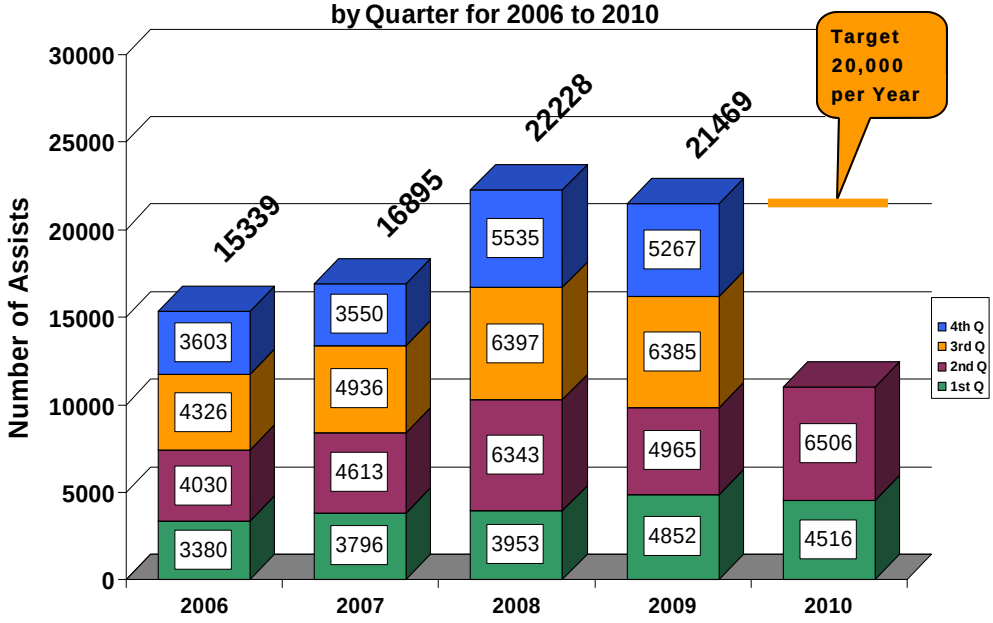
Purpose / Description of measure:

This measure tracks the use of the Connecticut Highway Assistance Motorist Patrol (CHAMP) program on Connecticut's highways. CHAMP is a roadway service patrol program operated by CTDOT, which provides assistance to motorists by changing flat tires, jump starting, pushing vehicles to shoulders, providing fuel and offering shelter. The service patrols respond to highway accidents and notify Highway Operations Centers in Newington and Bridgeport of the need for State Police, medical, fire and/or other emergency response. They help provide quick clearance of incidents to reduce traffic congestion and delays. Patrol drivers also remove highway debris and dead animals, report damaged guiderail, illumination and drainage problems, and provide travel assistance to motorists on the highway. CHAMP patrols operate along the I-95 corridor statewide, I-91 (East Windsor to Meriden and New Haven), I-84 (Manchester to New York line), Route 15 (Merritt Parkway), I-395 in the southeast, and on other routes.

Discussion of trend:

In Figure 1, it can be observed that the number of motorist assists increased significantly during 2008 from previous years. This was due to the addition of patrols on I-84, Waterbury/Danbury, the Merritt Parkway, and in southeast Connecticut (I-95/I-395). The number of assists for the second quarter of 2010 is 30 percent greater than the same quarter of 2009 (6506 assists compared to 4965). The variability between quarters is the result of state budget restrictions, where CHAMP patrols are not always deployed at 100 percent, which can impact the ability to reach the target number of assists.

Figure 1. Number of CHAMP Motorist Assists by Quarter for 2006 to 2010



Performance Measures

Objective:
Preservation

Program:
Road Condition

Measure:
Percent of Roads with Good Ride Quality

Report Date:
October 1, 2010

Data Frequency: Annual

Current Reported Value: *44% of NHS roads with Good Ride Quality*

Performance Target Value: *Increase the percentage of roads with Good Ride Quality*

Source: *Bureau of Engineering and Construction*
Mr. Edgardo Block, P.E.

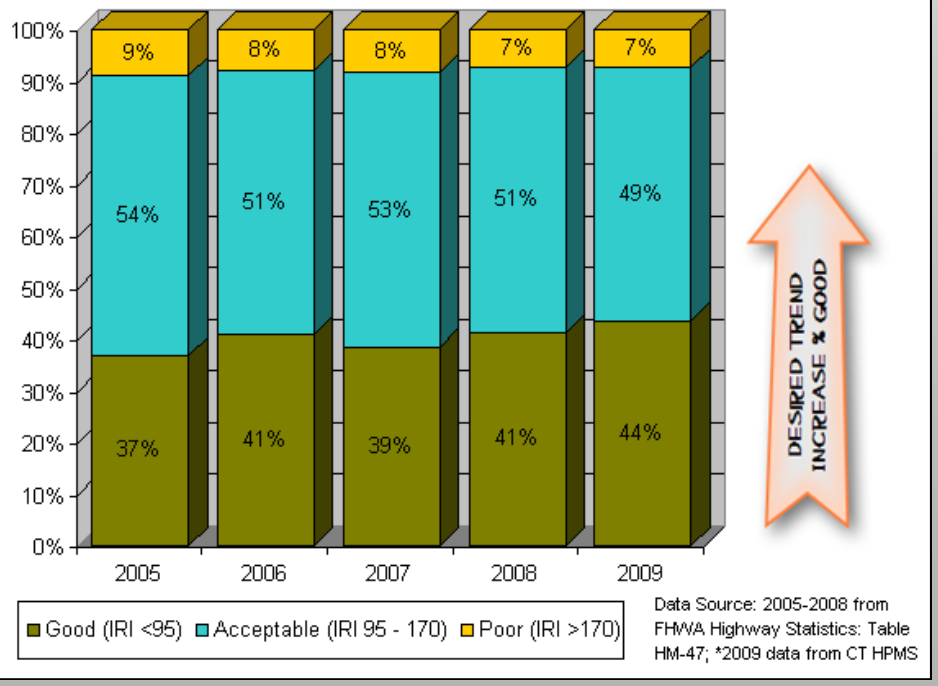
Note: Data for this measure becomes available for reporting annually in June for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2009 through 12/31/2009.

Purpose / Description of measure:

This measure tracks the roughness (complement of smoothness) of pavements on Connecticut's state-maintained roads. The general public's perception of a good road is one that provides a smooth ride. Roughness is an important pavement characteristic because it affects not only ride quality but also vehicle delay costs, fuel consumption and both vehicle and roadway maintenance costs. The Department uses a worldwide standard for measuring pavement smoothness called the International Roughness Index, or IRI. This index provides a consistent and comparable measure of pavement in terms of the number of vertical bump inches per mile driven. IRI is reported as inches per mile. The lower the IRI number, the smoother the ride. The Federal Highway Administration (FHWA) requires that all states measure and submit IRI data annually for the National Highway System (NHS). The NHS includes interstate and other routes identified as having strategic defense characteristics, as well as routes providing access to major ports, airports, public transportation and intermodal facilities.

(continued)

Figure 1. Ride Quality on National Highway System (NHS) Roads in Connecticut for 2005 - 2009



(cont.) Discussion of trend:

Figure 1 on the previous page shows that ride quality on Connecticut's NHS routes has gradually been improving. The percentage of NHS Routes rated good has increased from 37 percent in 2005 to 44 percent in 2009, while the percentage of roads rated poor has decreased slightly to 7 percent over the same period. The goal is to continue to increase the percent of roads in good condition by implementing pavement preservation principles and fully utilizing CTDOT's Pavement Management System. Figure 2 (Right) compares the ride quality on Connecticut's NHS routes with the other New England states and New York for the year 2008.

Figure 2. Ride Quality on the National Highway System in New England and New York, 2008

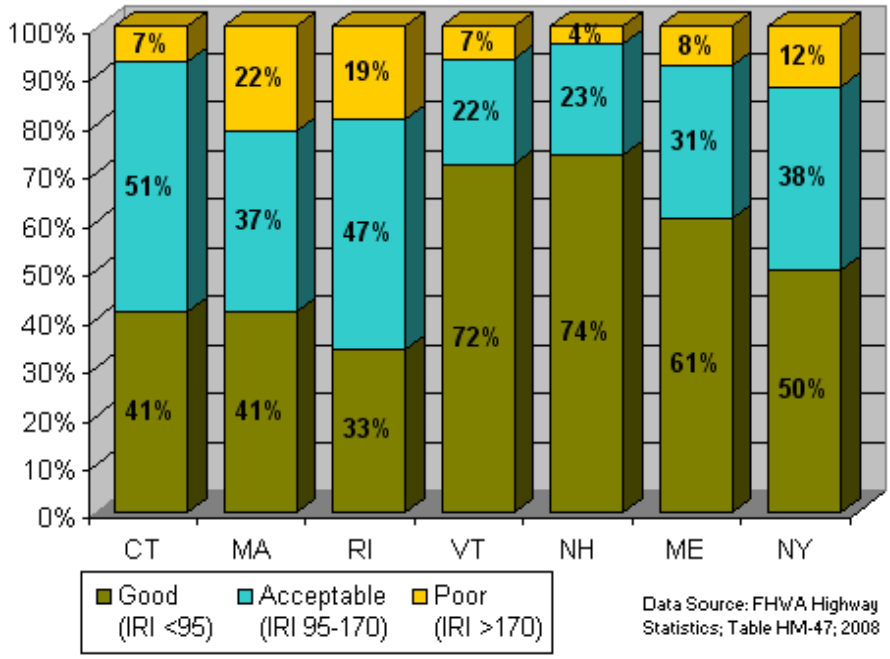


Figure 3. Ride Quality for Entire CTDOT Highway Network (NHS & Non-NHS CY 2006 - 2009)

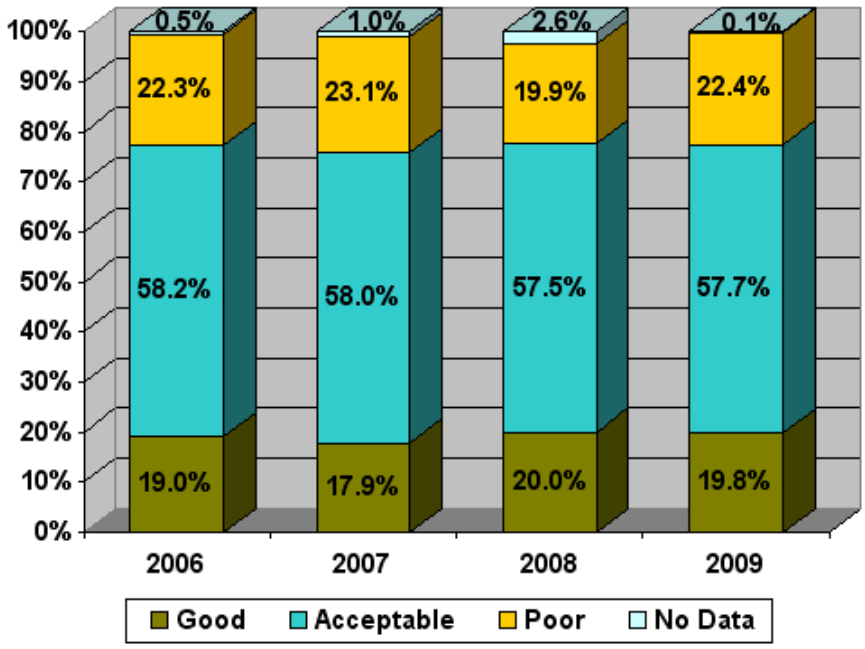


Figure 3 (Left) shows the ride quality of Connecticut's entire state maintained roadway network (approx. 3,744 miles) for calendar years 2006 through 2009. The entire roadway network includes both NHS and non-NHS roadways that are the maintenance responsibility of the Connecticut DOT. As shown in this graph, when the non-NHS roadways are factored in, the percent of the roads with good ride quality is reduced significantly.

NOTE: The ride quality for the entire network was not reported in previous quarters.

Performance Measures

Objective:
Preservation

Program:
Bridge Maintenance

Measure:
Number of Bridge Work Items Completed

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *Number of bridge work items:*
Received — 397
Completed — 304
Cumulative Backlog — 3521

Performance Target Value: *Maximize completion of work items and strive for zero growth in backlog during first year of the new bridge maintenance initiative.*

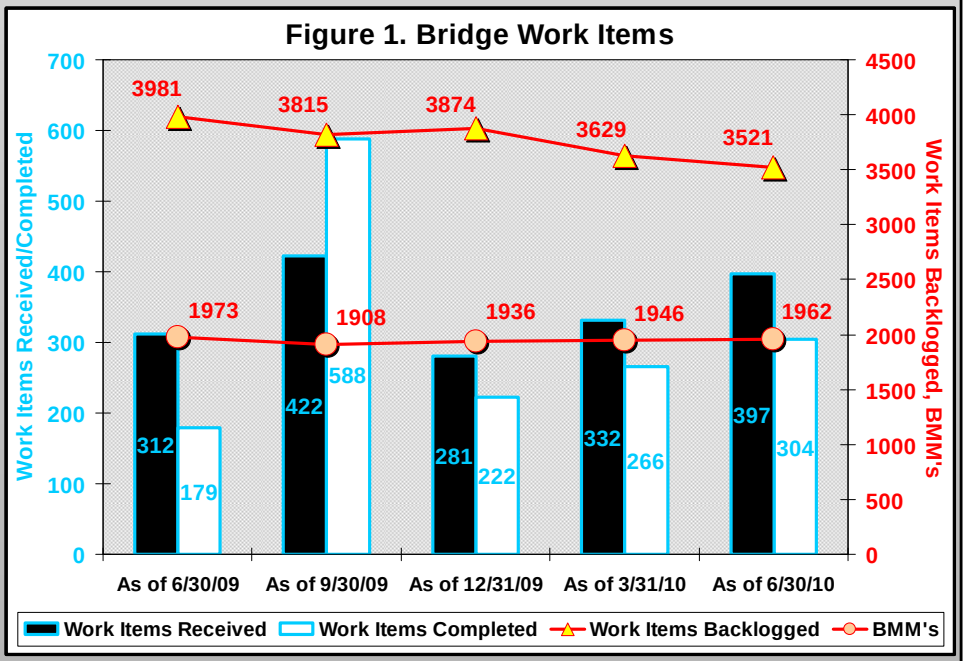
Source: *Bureau of Highway Operations*
Mr. Richard Van Allen, P.E.

Note: Data for this measure becomes available quarterly. The latest data set used for this posting covers the calendar year second quarter from 4/1/2010 through 6/30/2010.

Purpose / Description of measure:

This measure tracks the progress of maintaining and improving the condition of bridges on Connecticut's highways. The Department seeks to preserve and extend the useful life of existing bridge structures. Upon completion of the bridge inspection process, a Bridge Maintenance Memorandum (BMM) is prepared that identifies deficiencies and areas of deterioration needing repair. Individual work items identified on each BMM vary in complexity from a small concrete spall to replacing bridge expansion bearings. Some items require specialized equipment and/or use of contractual services such as installing bridge deck joints. Other items such as bridge beam end painting are programmed into the federally funded Bridge Preventive Maintenance Program. The repair work is scheduled based on criticality. Due to the advanced age of Connecticut's infrastructure, both the number of bridge inspections and needed repairs continues to increase.

Figure 1. Bridge Work Items



Discussion of trend:

During the most recent quarter (see Figure 1) the cumulative bridge work item backlog, was at 3,251. The short term target is to maintain a zero gain in the backlog of 3,874 in the first year of the initiative by increasing bridge maintenance activities and resources needed to accomplish this work. The goal for subsequent years will be to significantly decrease the backlog.

Performance Measures

Objective:
Preservation

Program:
Bridge Condition

Measure:
Percent of CTDOT Roadway Bridges in Good Condition

Report Date:
July 1, 2010

Data Frequency: Annual

Current Reported Value: *34% of bridges in good condition*

Performance Target Value: *Increase percentage of bridges in good condition*

Source: *Bureau of Engineering and Construction*
Mr. Robert Zaffetti, P.E.

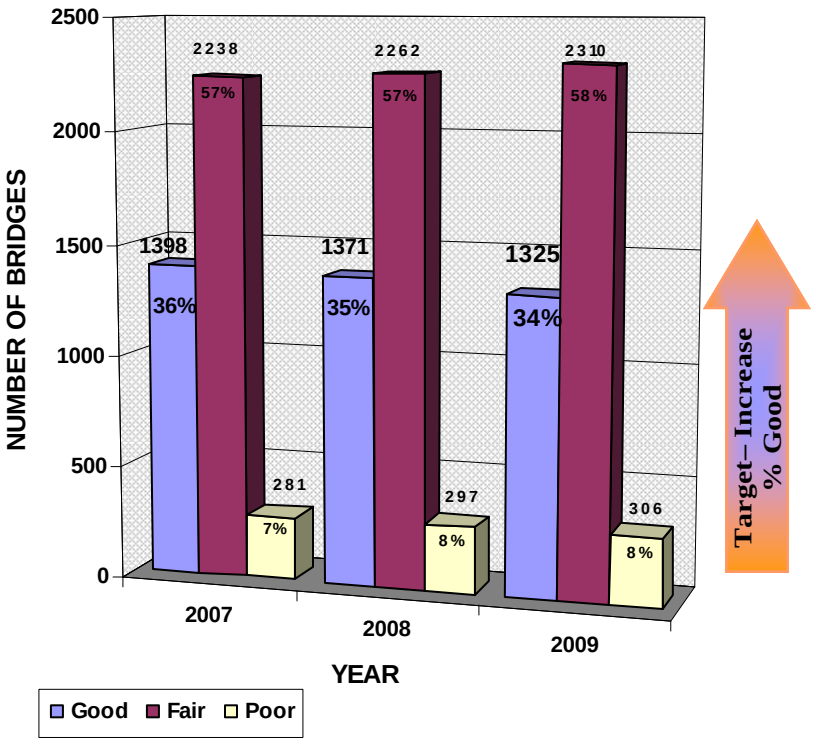
Note: Data for this measure becomes available for reporting annually in July for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2009 through 12/31/2009.

Purpose / Description of measure:

This measure tracks the condition of roadway bridges maintained by the Connecticut Department of Transportation (CTDOT). The Department is directly responsible for almost 4,000 bridges, including all Connecticut National Bridge Inventory (NBI), Connecticut Non-NBI, Adopted and Orphan bridges. The Department also inspects and maintains several special structures (i.e. Tunnel and Pedestrian Bridges) which are not included in this measure. Almost 1,300 additional bridges owned by Connecticut's Municipalities or the Connecticut Department of Environmental Protection or located on Private Property are inspected by CTDOT but are not considered in this measure since they are not maintained by CTDOT.

(Continued)

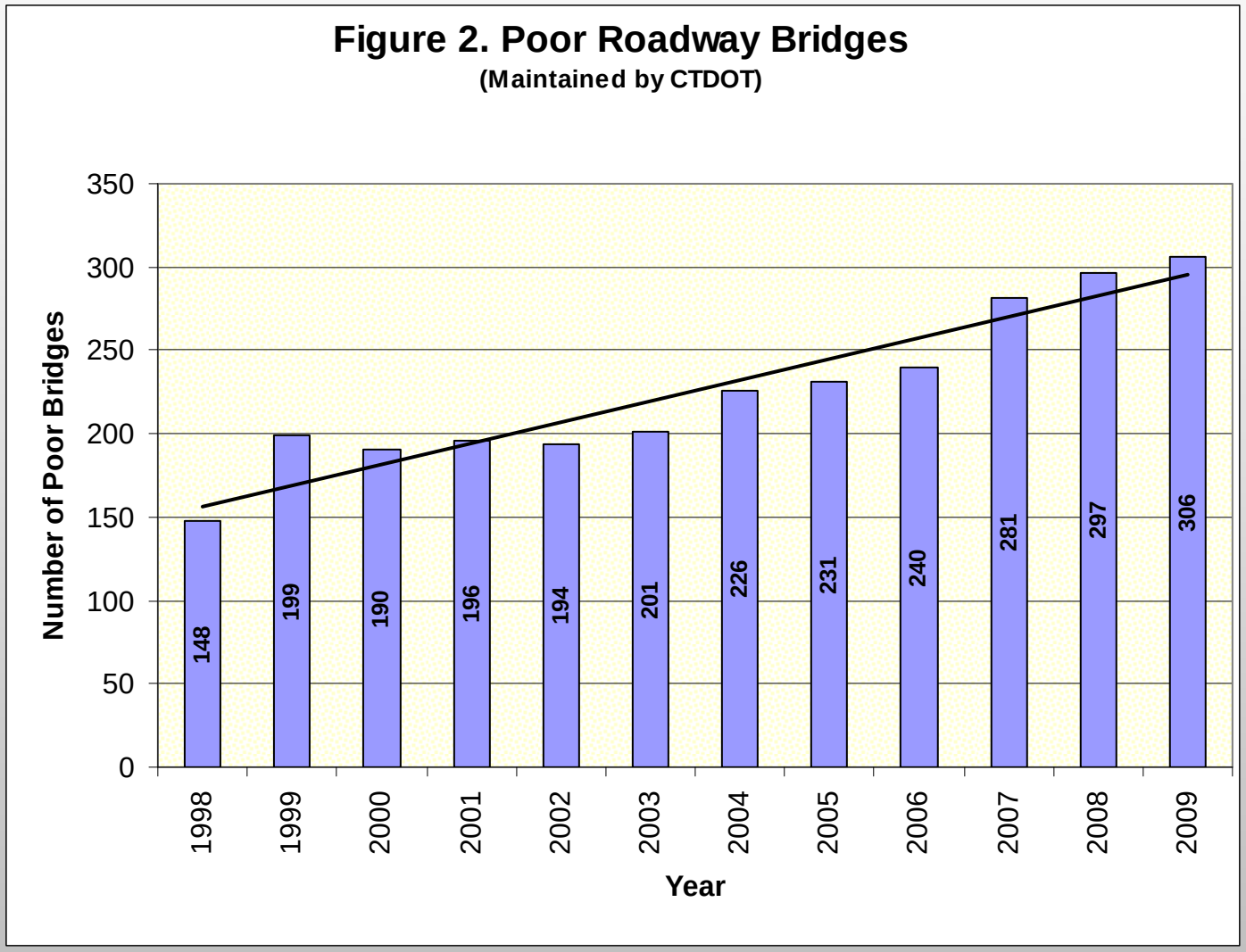
Figure 1. ROADWAY BRIDGES MAINTAINED BY CTDOT (Good - Fair - Poor)



Note: Roadway Bridges Maintained by CTDOT include State NBI, State Non-NBI, Adopted, and Orphan.

Purpose / Description of measure: (Continued)

The condition of all bridge decks, superstructures and substructures are rated on a scale from 0 (failed condition) to 9 (excellent condition). The lowest rating becomes the bridge's overall rating. Whenever the condition rating of a bridge falls into the "Poor" category (4), the Department further reviews its condition, assesses the inspection frequency, adds the structure to the Bridge Program List and initiates a project to address the needs.



Discussion of trend:

Figure 1 shows that the percent of bridges in good condition declined by one percent from 2008 to 2009. As indicated in figure 2, the number of bridges rated "Poor" has been increasing since 1998 due in part to the aging infrastructure. The Department has recently allocated additional resources into bridge maintenance projects to reverse CTDOT's trend and align the Department with national trends of yearly increases in the number of bridges rated "Good".

Performance Measures

Objective: **Preservation**

Program: **Rail Condition**

Measure:

Mean Distance Between Failures (Rail)

Report Date: **October 1, 2010**

Data Frequency: Quarterly

Current Reported Value:
Locomotive — 27,970 mi (2010 Q2)
Coach — 371,192 mi (2010 Q2)
M2 EMU — 122,919 mi (2010 Q2)
M4 EMU — 40,337 mi (2010 Q2)
M6 EMU — 92,905 mi (2010 Q2)

Performance Target Value:
Locomotive — 35,000 mi
Coach — 260,000 mi
M2 EMU — 80,000 mi
M4 EMU — 65,000 mi
M6 EMU — 60,000 mi

Source: *Bureau of Public Transportation — Mr. Eugene Colonese*

Note: Data for this measure becomes available monthly. The data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010).

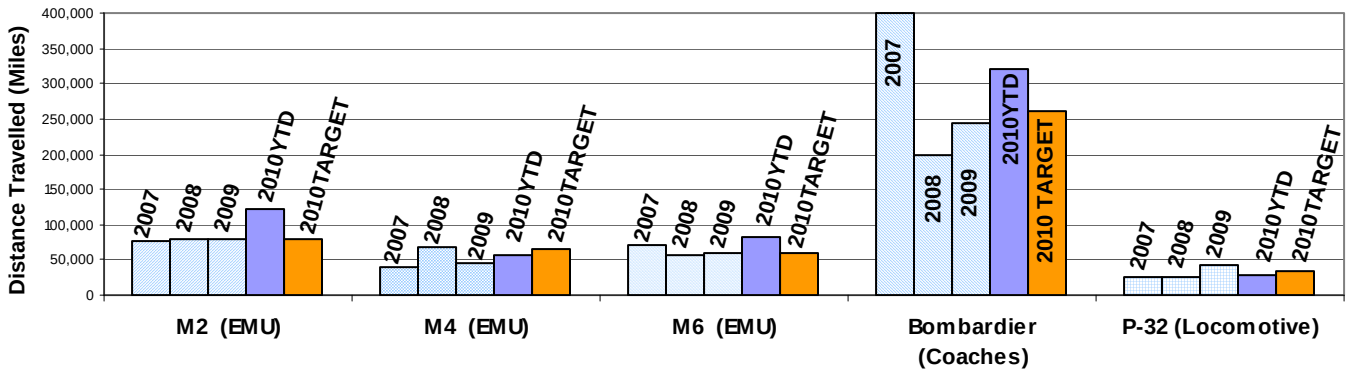
Purpose / Description of measure:

This measure tracks the reliability of MetroNorth train service on the New Haven Line. Mean Distance between Failures (MDBF) is an industry standard for measuring the reliability of a rail car fleet. It is calculated by dividing the total miles operated by the total number of confirmed primary failures, by car or locomotive fleet. A confirmed primary failure is defined as a failure of any duration for mechanical cause that occurs to a revenue train that is reported late at its final terminal by more than 5 minutes and 59 seconds. Generally speaking, the greater the MDBF, the better the on-time performance of train service.

Discussion of trend:

Figure 1 shows a graphic of MDBF for five types of rail vehicles for 2007 through the second quarter of 2010. The same information is presented in tabular form in Figure 2. In 2001, the Department began an M2 Electric Multiple Unit (EMU) Critical System Replacement (CSR) program, which has dramatically improved the MDBF for the M2 fleet. In 2004, the MDBF for M2 cars was just under 50,000 miles. For 2009, the MDBF for M2 rail cars averaged over 80,000 miles. (cont.)

Figure 1. Mean Distance Between Failures
Calendar Year 2007 through Second Quarter of 2010



The 2010 target for the MDBF for M2s was raised to 80,000 miles (from 73,000 miles in 2009) to reflect the increases in recent measured performance. On the other hand, the targets for the M4s, M6s and Bombardiers were reduced in response to the aging condition of these fleet vehicles. As can be noted from Figures 1 and 2, all vehicles with the exception of the locomotives and M4s exceeded the 2010 targets during the second quarter. Three hundred new M8 model EMUs will replace and complement the existing EMUs in the coming years. CTDOT took delivery of the first model M8s during late 2009. These first arrivals are being rigorously tested before being placed into service. It is hoped to have the first 22 of the M8s in passenger revenue service by the end of 2010.

Figure 2. Table of Mean Distance (Miles) Between Failures for Locomotives, Coaches and EMUs (2007 through 2010)

Equipment Type	2007	2008	2009	2010 YTD	2010 Target Value
Locomotives					
P-32 (Genesis Dual Mode)	25,590	25,188	41,831	**28,777**	35,000
Coaches					
Bombardier	400,405	199,493	244,120	**320,763**	260,000
EMUs					
M2	76,892	79,887	80,837	**122,941**	80,000
M4	39,773	67,924	45,505	**55,649**	65,000
M6	70,680	56,976	59,393	**80,949**	60,000

Performance Measures

Objective:
Preservation

Program:
Transit Condition

Measure:
Average Miles Between Road Calls (Bus)

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *4,008 Mi.—SFY 2010 Q4 (CY 2010 Q2)*
4,371 Mi.—SFY 2010 (July 1, '09-Jun 30, '10)

Performance Target Value: *5,000 — Miles Between Road Calls*

Source: *Bureau of Public Transportation*
Mr. Michael Sanders

Note: Data for this measure becomes available for reporting quarterly based on state fiscal year (July 1 through June 30). The latest data set used for this posting covers the time period from April 1, 2010 through June 30, 2010, which is quarter 4 of State Fiscal Year (SFY) 2010.

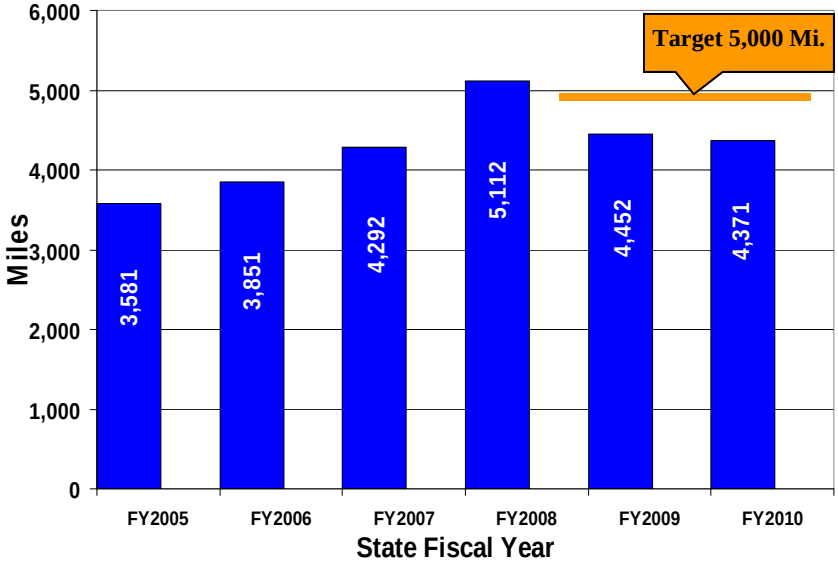
Purpose / Description of measure:

This measure tracks the reliability of CTTransit bus service. Miles between road calls is the industry standard performance metric used nationally by bus operators to measure availability and reliability of equipment. Road calls are traditionally counted when a bus misses one of its scheduled trips. In any given year, the number of road calls can be affected by the age of the fleet, the occurrence of fleet-wide defects on a certain model or model year of buses, the weather, and other factors.

Discussion of trend:

During the second quarter of calendar year 2010, the miles between road calls for CTTransit buses in the Hartford, New Haven and Stamford Divisions (CTTransit's largest operating divisions) averaged 4,008. Figure 1 shows the trend for state fiscal years (SFY) 2005 through 2010, for these same groups of buses. The decline since FY2008 is due primarily to the increased average age of the bus fleet. This trend should begin to reverse as older buses are replaced and supplemented with new ones, which are being purchased with federal stimulus funds.

Figure 1. Miles Between Road Calls (Bus) by State Fiscal Year



Performance Measures

Objective:
Preservation

Program:
Transit Operations

Measure:
Average Age of Bus Fleet

Report Date:
April 1, 2010

Data Frequency: Annual

Current Reported Value: *7.6 years — state-owned fleet*
5.8 years — transit-district-owned fleet

Performance Target Value: *6 years — average fleet age*

Source: *Bureau of Public Transportation*
Mr. Michael Sanders

Note: Data for this measure becomes available for reporting annually in December of the current Calendar Year. The latest data set used for this posting covers the time period ending 12/31/2009.

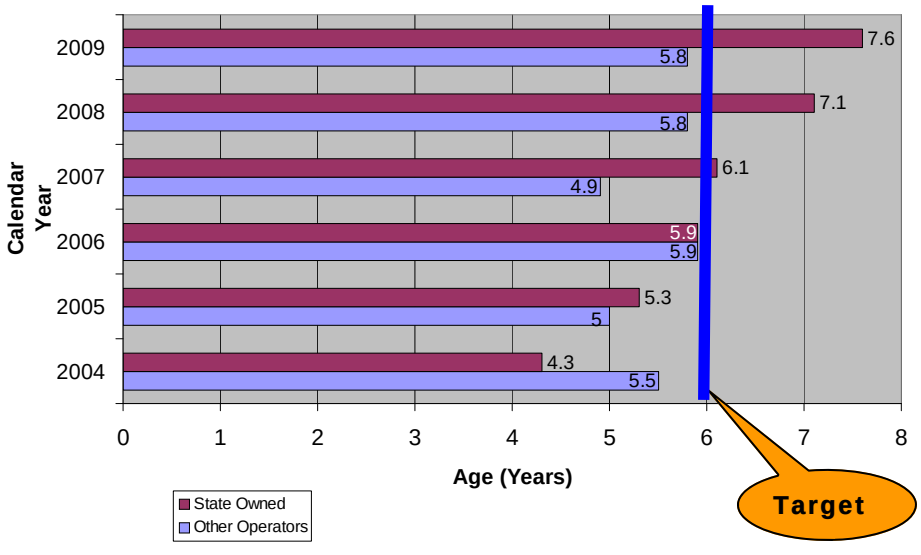
Purpose / Description of measure:

This measure tracks the average age of Connecticut's transit fleet of buses. The average age statistic is important, as older buses tend to require a higher level of maintenance to keep them operating efficiently and reliably. As the owner of the CTTransit bus system, the CTDOT purchases capital assets through the State procurement process for the majority of the local transit, Americans with Disabilities Act (ADA) paratransit and commuter express operations. The expected life of heavy-duty transit buses is 12 years. The Federal Transit Administration (FTA) uses a guideline that full-sized heavy-duty transit buses are eligible for replacement at 12 years of age. Under an ideal situation, one-twelfth of the buses would be replaced every year, with an average fleet age of 6 years, which is the performance target value. Due to financial constraints, the Department typically initiates the procurement process for new equipment in year 12, with delivery completed by year 14. Due to variable procurements in the past, the fleet age is not uniformly distributed from new to old (0 to 12 years), but rather is concentrated in certain age ranges.

Discussion of trend:

Figure 1 is a plot of the average age of buses for both state owned and transit district operators, for calendar years 2004 through 2009. The average overall combined bus fleet age at the end of 2009 is approximately 7.1 years. Over the five year period (2004 through 2009), the average fleet age has increased by approximately two years, whereas the state-owned bus fleet age has increased by more than three years. A program to replace buses using federal stimulus funds should help to stabilize or reverse this increasing trend in the near future.

Figure 1. Average Age of Connecticut's Bus Fleet



Performance Measures

Objective: **Preservation**

Program: **Airport Condition**

Measure:
Percent of Airport Pavement Rated Good or Excellent

Report Date:
January 1, 2010

Data Frequency: Annual

Current Reported Value: *General Aviation Airports—90% Good or Excellent*
Bradley International Airport—100% Good or Excellent

Performance Target Value: *100% Good or Excellent*

Source: *Bureau of Aviation and Ports*
Mr. Robert Bruno

Note: Data for this measure becomes available for reporting annually in December for the current Calendar Year. The latest data set used for this posting covers the time period from 1/1/2009 through 12/31/2009.

Purpose / Description of measure:
This measure tracks the overall pavement condition of CTDOT's Airports. For all the General Aviation Airports (GAA) combined (total pavement area 897,000 square yards (SY)), 90 percent of the pavement is rated as good or excellent. For Bradley International Airport (total pavement area 1,378,167 SY), 100 percent of the pavement is rated good or excellent. A detailed breakup is provided below.

Waterbury-Oxford Airport (213,000 SY)
12% poor 67% good 21% excellent
Good or Excellent=88%

Groton-New London Airport (267,000 SY)
23% poor 56% good 21% excellent
Good or Excellent=77%

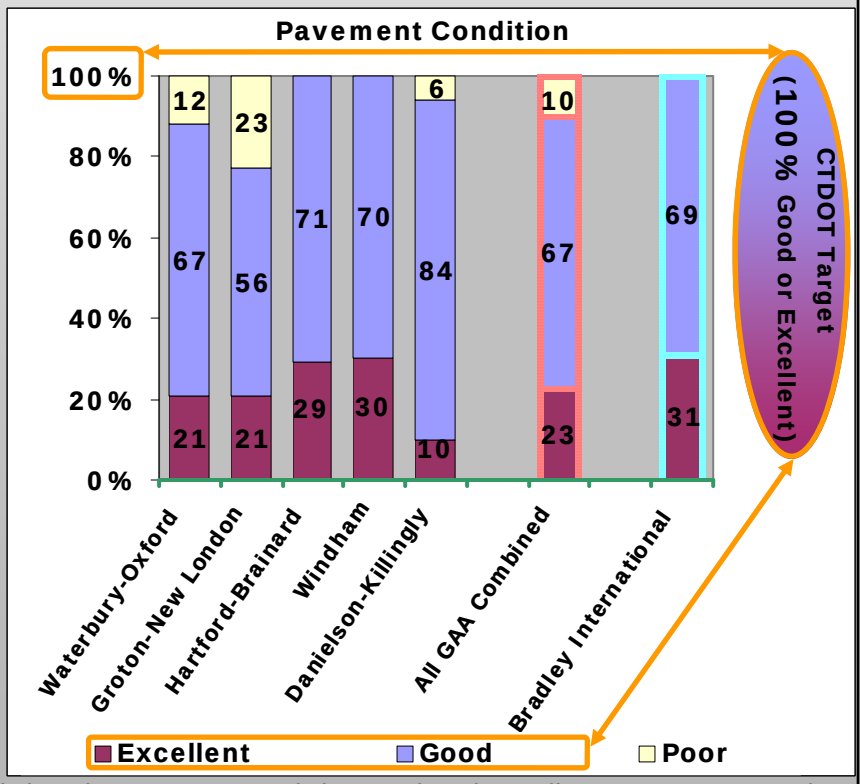
Hartford Brainard Airport (209,000 SY)
0% poor 71% good 29% excellent
Good or Excellent=100%

Windham Airport (151,000 SY)
0% poor 70% good 30% excellent
Good or Excellent=100%

Danielson-Killingly Airport (57,000 SY)
6% poor 84% good 10% excellent
Good or Excellent=94%

All General Aviation Airports (combined)
10% poor 67% good 23% excellent
Good or Excellent=90%

Bradley International Airport (1,378,167 SY)
0% poor 69% good 31% excellent
Good or Excellent=100%



Discussion of trend:
The goal of the Bureau of Aviation and Ports is to bring the percentage of the good and excellent pavements at the General Aviation Airports to 100%. The percentage of the pavement ranked poor has been steadily decreasing in the recent years, going down to 10% this year, and is now limited to lightly used aprons in most cases under lease to private operators.

Return to Summary

Performance Measures

Objective:
Efficiency & Effectiveness

Program:
Rail Operations

Measure:
Number of Rail Passengers

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Values: *NHL— 9,535,298 (Q2)*
SLE — 146,211 (Q2)

Performance Target Values: *NHL— 9,193,656 (Q2)*
SLE— 145,349 (Q2)

Source: *Bureau of Public Transportation*
Mr. Eugene Colonese

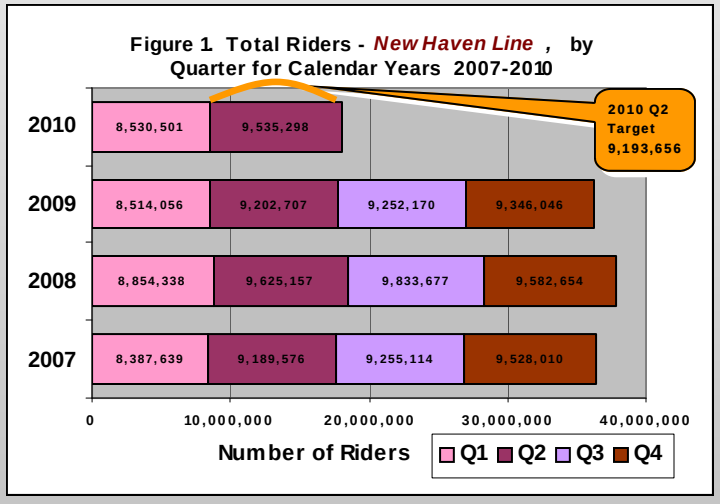
Note: Data for this measure becomes available monthly. The data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010).

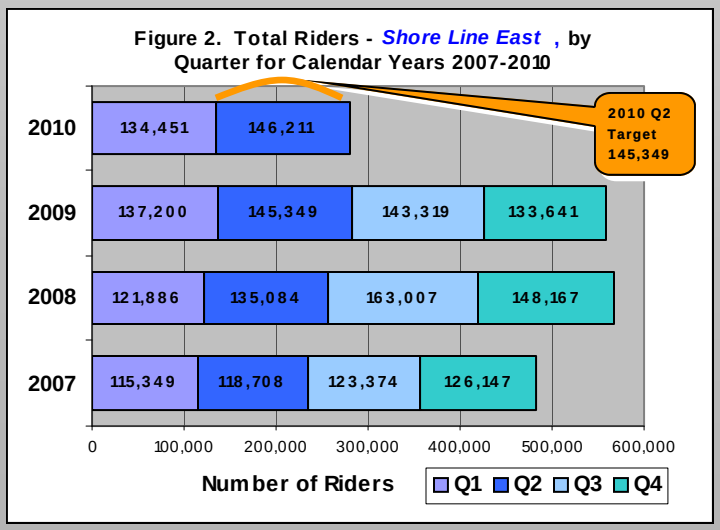
Purpose / Description of measure:

This measure tracks the usage of Connecticut's commuter rail passenger service on the New Haven Line (NHL) and the Shore Line East (SLE). CTDOT is committed to improving rail service through a significant investment in new equipment, new rail cars, new train stations, and improved repair facilities. The New Haven Line is one of the busiest commuter lines in North America, carrying over 36 million passengers in 2009. The NHL (operated by Metro North Railroad) serves stations along the shoreline from New Haven to Greenwich and on to Grand Central Terminal in New York City. Shore Line East trains are owned and operated by CTDOT under contract with AMTRAK, to provide daily rail operations from New London to New Haven, with select trains continuing to Bridgeport and Stamford. Additional information about NHL and SLE is available at http://www.ct.gov/dot/cwp/view.asp?a=1386&q=316722

Discussion of trend:

Figures 1 and 2 provide calendar year quarterly comparisons for ridership from 2007 through the second quarter of 2010 for the NHL and SLE, respectively. Ridership increased by 3.6% on the NHL, and by 0.6% on the SLE compared to the second quarter of 2009. The number of NHL riders surpassed the target by 3.7 percent for this quarter. These numbers offer hope for further increases in ridership in future quarters.





Performance Measures

Objective:
Efficiency & Effectiveness

Program:
Rail Operations

Measure:
Percent of Rail On-Time Performance

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value:
NHL—97.5 Percent On Time (Q2)
SLE—92.5 Percent On Time (Q2)

Performance Target Value:
NHL—97.0 Percent On time
SLE—95.0 Percent On time

Source:
Bureau of Public Transportation
Mr. Eugene Colonese

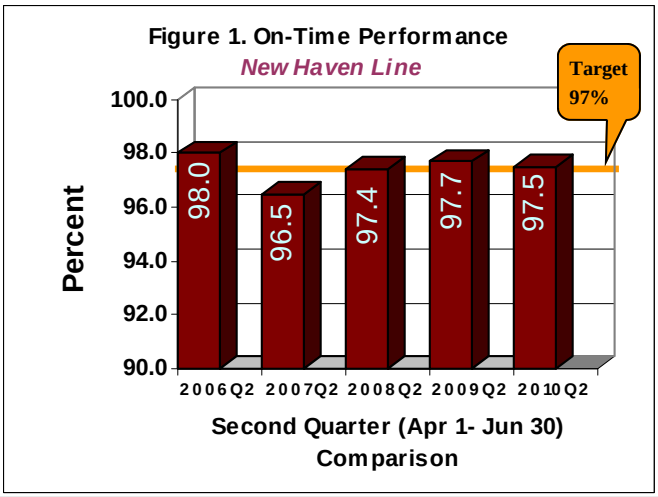
Note: Data for this measure becomes available monthly. The data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010).

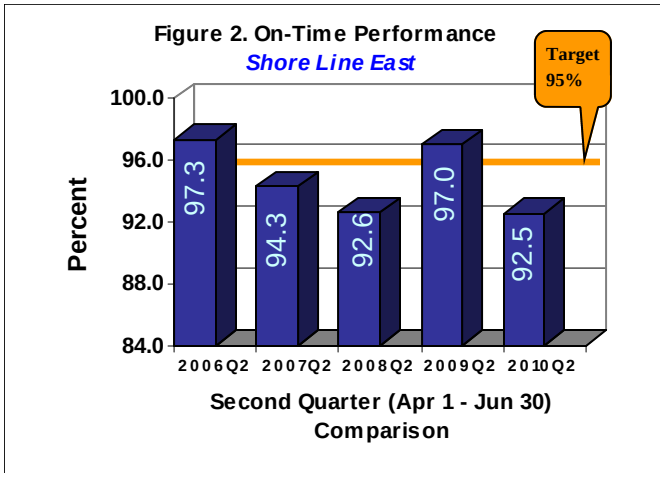
Purpose / Description of measure:

This measure tracks the On-Time Performance (OTP) of Connecticut's commuter rail service on the New Haven Line (NHL) and the Shore Line East (SLE). OTP is a key measure for service reliability to its customers and is the industry standard used to compare existing services with other similar competitors. A commuter train is considered "on-time" if it reaches its final destination within five minutes and 59 seconds of its scheduled arrival time.

Discussion of trend:

Figures 1 and 2 illustrate the on-time performance of NHL and SLE for calendar-year second quarters from 2006 through 2010. The NHL OTP surpassed the target of 97 percent, for the April 1 through June 30, 2010 period. During the second quarter of the past five years, SLE OTP has varied from the current quarterly low of 92.5 percent to a high of 97.3 percent in 2006. The target for SLE of 95 percent OTP has been exceeded during 40 percent of the second quarters since 2006. During the second quarter of the past five years, NHL OTP has varied from a quarterly low of 96.5 percent in 2007, to a high of 98 percent in 2006. The target for NHL of 97 percent OTP has been exceeded during 80 percent of the second quarters since 2006. The OTP record for the NHL makes this one of the most reliable heavy rail commuter services in the U.S. SLE service is dependent upon AMTRAK designated speeds during track and bridge maintenance and repairs.





Performance Measures

Objective:
Efficiency and Effectiveness

Program:
Airport Operations

Measure:
Number of Bradley International Airport Passengers

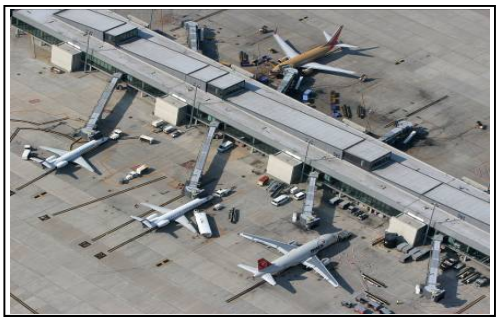
Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *Passengers — 1,372,015 (2010 Q2) (-1.9%)*

Performance Target Value: *Maintain or Exceed Year 2009 Passengers — 1,398,786 (2009 Q2) 5,260,480 (CY2009 Total)*

Source: *Bureau of Aviation and Ports*
Mr. Jeffrey Stewart



Note: Data for this measure becomes available monthly from the Bradley Board of Directors Budget Report. The latest data set used for this posting covers the calendar year 2010 second quarter (4/1/2010 through 6/30/2010).

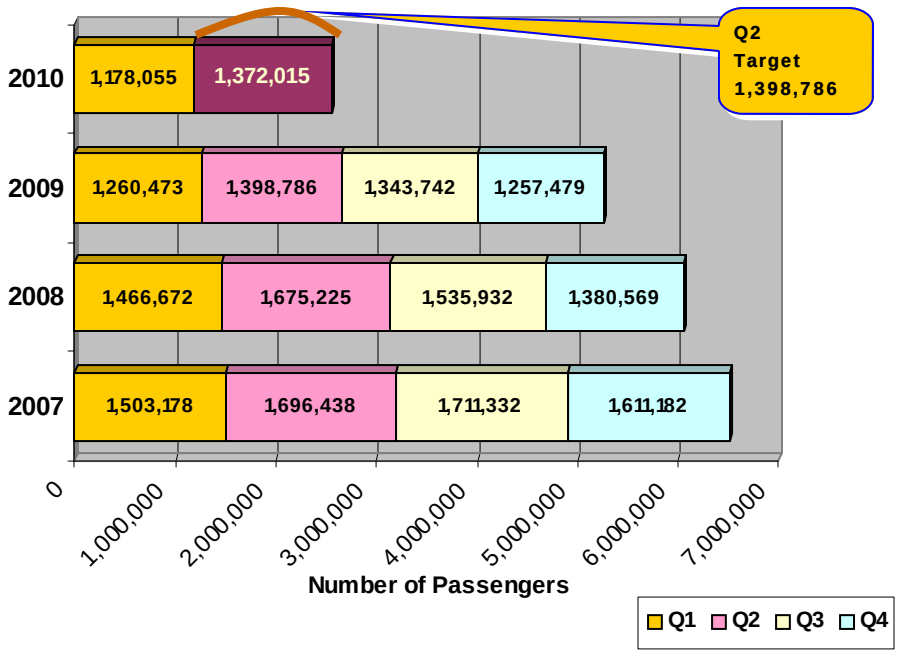
Purpose / Description of measure:

This measure tracks the total number of passengers (sum of enplanements and deplanements) at Connecticut's Bradley International Airport (Bradley). Bradley, New England's second largest airport, is owned by the State of Connecticut, and operated by the CTDOT Bureau of Aviation and Ports. CTDOT is committed to making Bradley a best-in-class operation that delivers the highest level of service to all its passengers, and functions as a powerful driver of the State's economy - and its future. Additional information about Bradley can found at www.bradleyairport.com

Discussion of trend:

Bradley, like most airports in the nation, has experienced a decline in air passenger travel over the last few years due to the slowing economy and volatile jet fuel costs. Figure 1 illustrates the quarterly number of airport passengers at Bradley from January 2007 through June 2010. The trend toward fewer passengers each quarter compared to the previous year's quarter has continued through the second quarter of 2010. The second quarter value is 1.9 percent lower than the target value. There were 26,771 fewer total passengers in quarter 2 of 2010 then for the same three-month period last year. This drop is much smaller, however, than drops in the previous 12 quarters.

Figure 1. Total Bradley Airport Passengers by Quarter for 2007-2010



Performance Measures

Objective:
Efficiency & Effectiveness

Program:
Airport Operations

Measure:
Revenue Generated from Bradley International Airport Parking

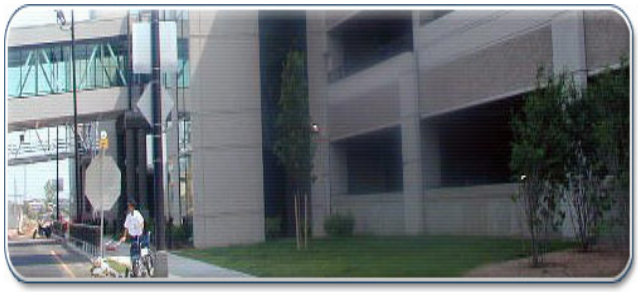
Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *$4,921,663 (2010 Q2) (+2.5%)*

Performance Target Value: *Maintain or Exceed 2009 Values-*
$4,802,600 (2009 Q2)
$18,520,000 (CY2009 Total)

Source: *Bureau of Aviation and Ports*
Mr. Jeffrey Stewart



Note: Data for this measure becomes available monthly from the Bradley Board of Directors Budget Report. The latest data set used for this posting covers the calendar year 2010 second quarter (4/1/2010 through 6/30/2010).

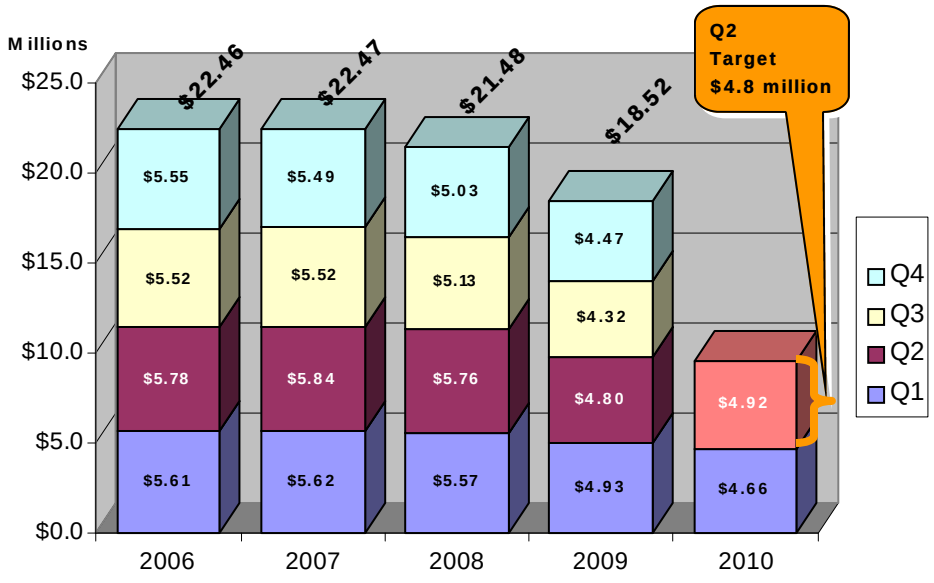
Purpose / Description of measure:

This measure tracks the use of state-owned parking facilities at Bradley International Airport (Bradley) via parking revenue. Bradley currently receives revenue from one parking garage (containing both long- and short-term parking) and seven surface parking lots. The Airport's Master Plan includes a new future parking garage in conjunction with the replacement of Terminal B (Murphy Terminal). As Bradley continues its expansion and modernization program, along with increased marketing efforts, parking revenue is projected to trend upward in the coming years in conjunction with increased usage of the airport.

Discussion of trend:

Parking revenue tends to correlate with the number of passengers served. Figure 1 illustrates the quarterly parking revenue from 2006 through 2010. The parking revenue for the second quarter (March through June, 2010) increased by 2.5 percent over the same three-month period in 2009. *This is the first quarterly increase in parking revenue since quarter 2 of 2007.* Due to the economic downturn, the parking revenue had declined for the previous nine quarters (relative to the same quarter of the previous year).

Figure 1. Bradley Parking Revenue (millions of dollars) by Quarter for Years 2006-2010



Performance Measures

Objective:
Efficiency and Effectiveness

Program:
Photolog Operations

Measure:
Cost Savings from Photolog Usage

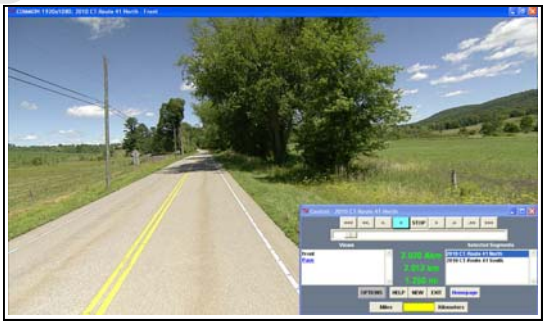
Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *$360,864 (2010 Q2)*

Performance Target Value: *$2,000,000 savings per year ($500,000 per quarter)*

Source: *Bureau of Engineering and Construction*
Mr. Bradley Overturf



Note: Data for this measure becomes available quarterly. The data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010).

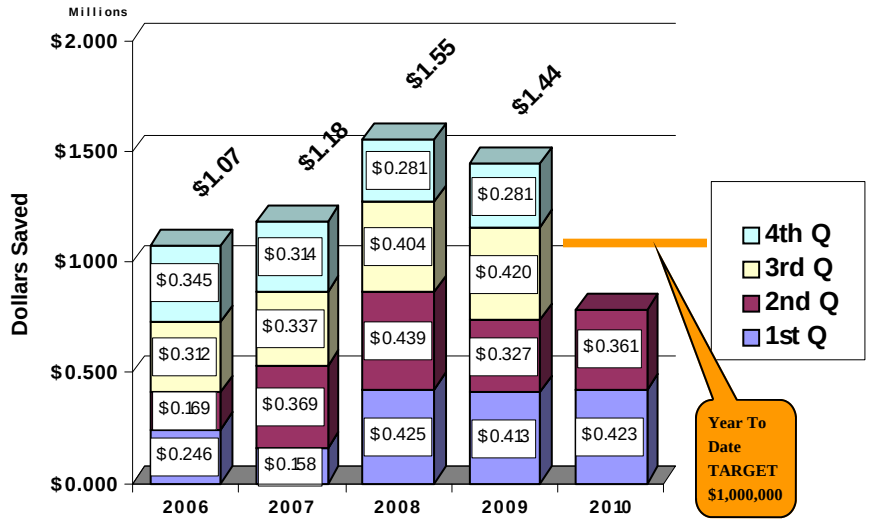
Purpose / Description of measure:

This measure tracks the money saved through the use of the photolog imaging system. "Photolog" is a sequence of forward-facing, driver's eye view, high definition roadway images, and associated engineering data. Annually, the entire state-maintained roadway network is photologged using two sophisticated vehicles that record the images and associated data at set intervals. The engineering data collected include high resolution laser/line scan pavement images, rut-depth measurements, International Roughness Index (IRI), Geographic Positioning System (GPS) coordinates, horizontal and vertical geometry, pavement cross slope, pavement grade, and bridge under-clearance distances. CTDOT employees, as well as FHWA and other state agencies, have access to DigitalHIWAY software to view and download roadway images and data. This usage results in a significant reduction in field trips. These datasets also form the backbone of CTDOT's pavement management system. For more information on photolog go to the Photolog Website, http://www.ct.gov/dot/photolog

Discussion of trend:

Figure 1 illustrates CTDOT's quarterly dollar savings for 2006 through 2010 resulting from the use of the photolog system by Department employees. The estimated savings for the second quarter of calendar year 2010 is $360,864*. The actual dollars saved may be significantly greater than that illustrated in Figure 1, as the data is reported for only 389 of the approximate 575 viewing stations. An estimate of the fleet vehicle miles saved due to photolog use for the second quarter of 2010 is 354,051. Department savings compared to expenses associated with photolog operations results in a benefit-cost ratio of at least 3 to 1. The goal is to increase the annual savings to the State each year by giving additional users easy access to photolog data and images. ***NOTE: 49 measured days are extrapolated to 63 work days for quarter 2.**

Figure 1. CTDOT Quarterly Savings (Millions of Dollars) from Photolog Use, for Calendar Years 2006 to 2010



Performance Measures

Objective:
Efficiency & Effectiveness

Program:
Acquisition

Measure:
Percent of Rights-of-Way Purchases Attained by Agreement

Report Date:
October 1, 2010

Data Frequency: Annual

Current Reported Value: *88 percent for State Fiscal Year (SFY) 2010*

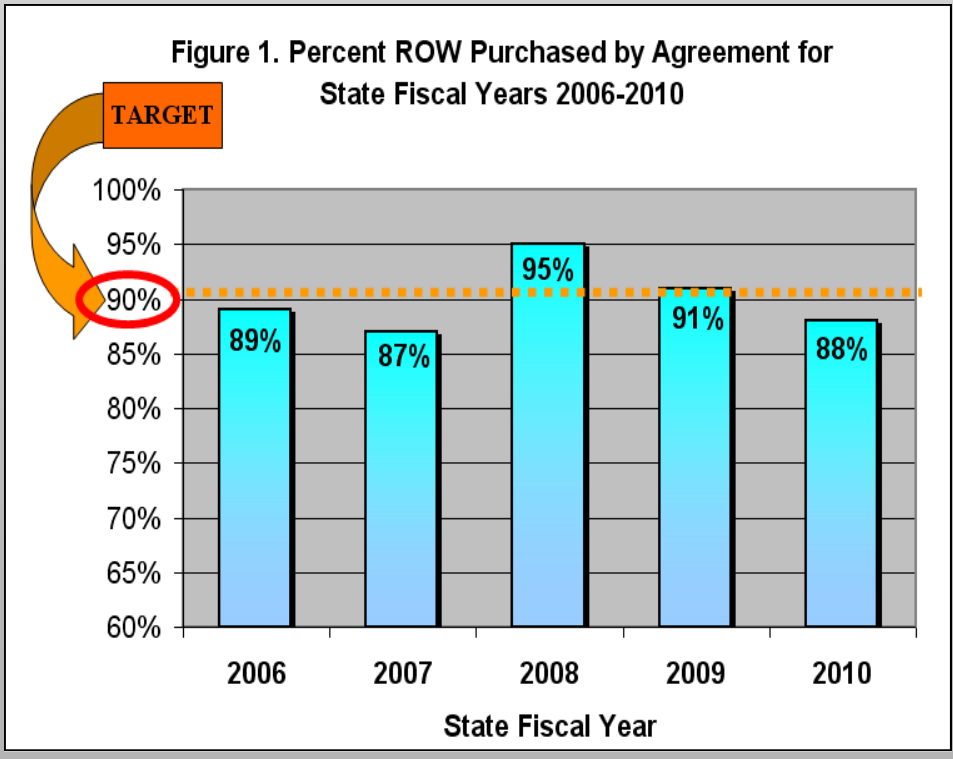
Performance Target Value: *Greater than 90 percent per year*

Source: *Bureau of Engineering and Construction*
Mr. John Randazzo

Note: Data for this measure becomes available for reporting annually in July for the previous state fiscal year. The latest data set used for this posting covers the time period from 7/1/2009 through 6/30/2010, which is State Fiscal Year 2010.

Purpose / Description of measure:

This measure tracks the percent of real estate purchases concluded by the Office of Rights of Way through agreement, prior to actual eminent domain trial proceedings. The Office of Rights of Way acquired real property rights (land and buildings, various easements, drainage rights of way, etc.) from 137 property owners for various transportation projects during the fiscal year ending June 30, 2010. Fifty-three percent (72) of these purchases were acquired by agreement, while 47 percent (65) were acquired via the eminent domain process. Of the 65 acquired by eminent domain, approximately 76 percent (49) were settled prior to actual trial. The indications are that over 88 percent of the Department's transportation related rights of way purchases were made by agreement during state fiscal year 2010.



Discussion of trend:

Figure 1 illustrates the percentage of ROW purchases attained by agreement or settlement during the past five fiscal years. This year (SFY 2010) the percentage has dropped slightly below the target of 90 percent to 88 percent.

Return to Summary

Performance Measures

Objective:
Efficiency and Effectiveness

Program:
Transit Operations

Measure:
Number of CTTransit Passenger Trips

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *6,443,459 passenger trips (2010 Q2)*

Performance Target Value: *6,250,000 passenger trips per quarter (25 million passenger trips per year)*

Source: *Bureau of Public Transportation*
Mr. Michael Sanders

Note: Data for this measure becomes available for reporting quarterly. The latest data set used for this posting covers the time period from 4/1/2010 through 6/39/2010. The quarterly data provided is for CTTransit for the Hartford, Stamford and New Haven Divisions only.

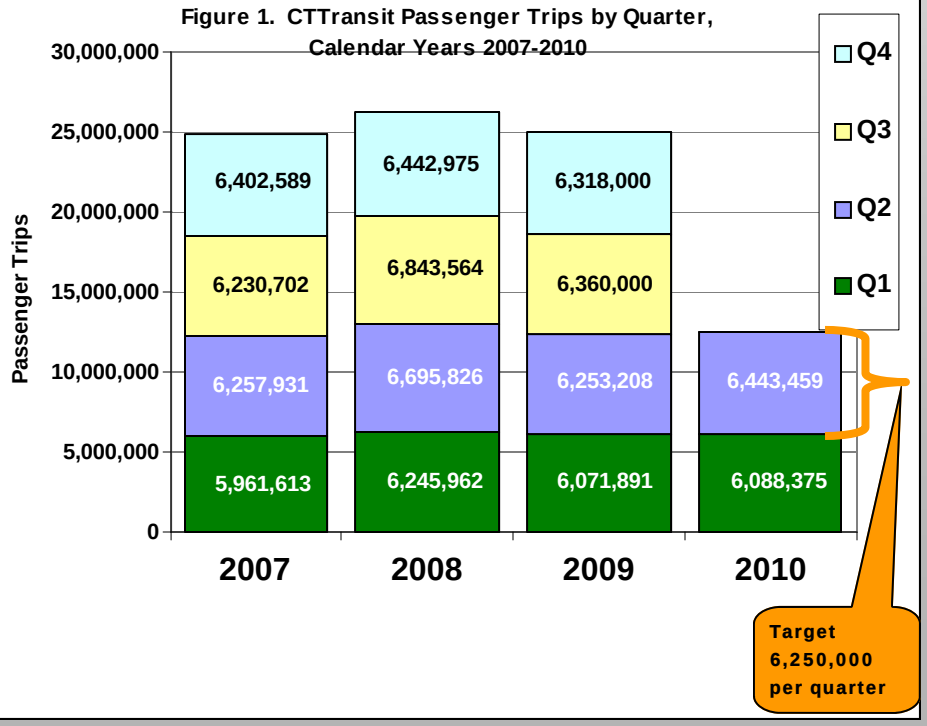
Purpose / Description of measure:

This measure tracks passenger ridership on the CTTransit fleet. Each person boarding a bus is counted as one passenger trip. CTTransit provides fixed-route bus service for Hartford, New Haven and Stamford. In the greater Hartford area, commuter express bus service from surrounding areas is also provided by CTTransit. CTDOT has consistently run advertising campaigns to market the bus systems, and has been increasing service options and coverage. Use of newer, cleaner, more energy efficient hybrid electric, low sulfur diesel, and hydrogen fuel cell buses also has made "taking the bus" a more attractive and 'greener' option. Additional information on transit can be found at http://www.cttransit.com .

Discussion of trend:

CTTransit quarterly ridership data for 2007 through 2010 is shown in Figure 1. Ridership increased between 2007 and 2008, likely as a result of the increase in gasoline prices and costs to own and operate passenger vehicles, as well as congestion delays during rush hours. Ridership declined by 4.7 percent during 2009, due to the economic downturn. The yearly target of 25 million passengers was still met in 2009, however. For 2010, there has been a three percent increase in ridership in the second quarter of 2010 compared to the second quarter of 2009.

Figure 1. CTTransit Passenger Trips by Quarter, Calendar Years 2007-2010



Performance Measures

Objective:
Quality of Life

Program:
Recycling

Measure:
Amount of Recycled Material Used in Projects

Report Date:
April 1, 2010

Data Frequency: Annual

Current Reported Value: *Demolition Debris—482,710 Tons; Wood—591 Tons; Steel—1,140 Tons*

Performance Target Value: *Maximize Recycling and Reuse of Materials*

Source: *Bureau of Policy and Planning*
Mr. Paul Corrente

Note: Data for this measure becomes available for reporting annually in January for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2009 through 12/31/2009.

Purpose/Description of measure:

This measure tracks the amount of construction/maintenance material recycled in CTDOT operations. Since the transportation network includes large quantities of pavement and bridge materials, all rehabilitation/ reconstruction activities affect a significant quantity of construction materials; in particular, concrete, pavement, steel, and wood. Fortunately, all of these materials are recyclable and/or re-usable. Nearly 100 percent of bituminous pavements that are milled or removed from roadways are reused in pavements. The construction demolition debris for concrete road and bridge replacements, airport runways and, in some cases, buildings can be reused as roadway base material or as structural fill. All steel and aluminum is 100 percent recyclable, and all brush and trees that are removed from the roadsides are chipped and handled in an environmentally acceptable way. When economically feasible, even recycled glass beverage containers have been incorporated into construction projects.

Table 1.
Recycling of Concrete, Asphalt Pavement, Wood and Steel in Construction and Maintenance Operations

Item	2003	2004	2006	2007	2008	2009
Demolition Debris (Tons)*	393,984	364,816	232,679	396,483	99,421	**482,710**
Wood (Tons)	7,352	470	85	380	1,703	**591**
Steel (Tons)	2,547	1,372	5,922	12,654	617	**1,140**

* Demolition Debris includes generated and reused Portland Cement Concrete and Bituminous Concrete.
Note: All steel and aluminum are surplused and sold for scrap recycling.
Recycling data from 2005 are not available.

Discussion of trend:

The materials shown in Table 1 are generated onsite or within a CTDOT project or property, and reused onsite or transported to another Department project or property for reuse. None of these materials are disposed of in landfills. Generally it is more economical to recycle and reuse materials than to import new materials onto a project jobsite. The decrease of demolition and steel recycling in 2008 is most likely the result of a reduction in the number of active construction projects during that year. Year to year fluctuations in Table 1, may also be partially due to recordkeeping methods. Each year different construction project locations must be tracked throughout the state.

Performance Measures

Objective: **Quality of Life**

Program: **Congestion Management**

Measure:

Percent of Road Network with Traffic Volumes Greater than Capacity

Report Date: **October 1, 2010**

Data Frequency: Annual

Current Reported Value: *8.80% miles over Capacity*

Performance Target Value: *Reduce Congestion Throughout the State*

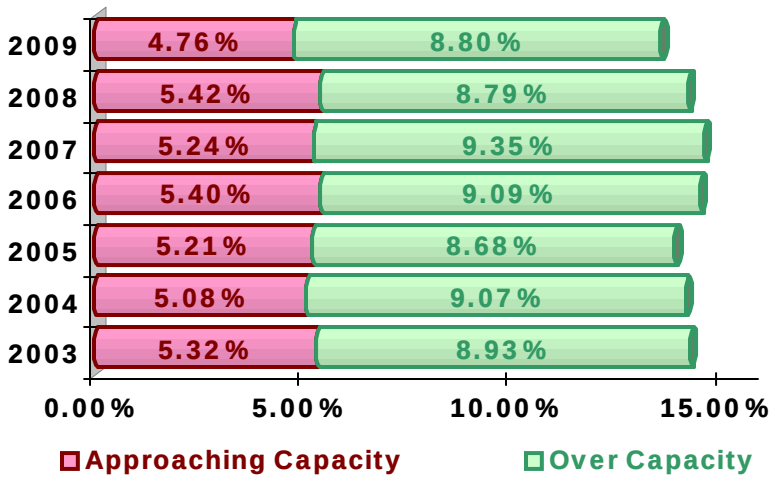
Source: *Bureau of Policy and Planning*
Mr. Michael Connors

Note: Data for this measure becomes available for reporting annually in September for the previous Calendar Year. The latest data set used for this posting covers the time period from 1/1/2009 through 12/31/2009.

Purpose / Description of measure:

This measure tracks the congestion on Connecticut state roadways. Highway congestion is caused when traffic demand approaches or exceeds the available capacity of the highway system. Traffic demands vary significantly, depending on the season of the year, the day of the week, and even the time of day. Congestion can also be measured in a number of ways – level of service, speed, travel time, and delay are commonly used measures. CTDOT is continuously in the process of looking at new ways to monitor and alleviate congestion. Travelers, however, have indicated that more important than the severity or magnitude of congestion is the reliability of the trip travel time. People in a large metropolitan area may accept that a 20 mile freeway trip takes 40 minutes during the peak period, so long as this predicted travel time is reliable and is not 25 minutes one day and two hours the next. The state is in the process of looking at new ways to monitor congestion management.

Figure 1. Percent of Miles Approaching or Above Capacity



2010 Data not available until September 2011

Discussion of trend:

Demand for highway travel continues to grow. Construction of new highway capacity to accommodate this growth in travel has not kept pace and is not likely to in the near future. Between 1980 and 1999, route miles of highways increased 1.5 percent, while vehicle miles of travel increased 76 percent.

Performance Measures

Objective:
Quality of Life

Program:
Congestion Management

Measure:
Average Highway Incident Duration Time

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *Car—39 minutes (2010 Q2); Jackknifed Tractor Trailer Truck—3 hrs, 31 min (2010 Q2); Overturned Tractor Trailer Truck—3 hrs, 3 min (2010 Q2);*

Performance Target Value: *Car—less than 45 minutes; Jackknifed Tractor Trailer Truck—less than 3 hours; Overturned Tractor Trailer Truck—less than 5 hours*

Source: *Bureau of Highway Operations*
Mr. Harold Decker

Note: Data for this measure becomes available for reporting quarterly. The data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010). Data is reported for all of I-95 in CT (New York to Rhode Island), and I-91 from I-95 to Exit 15.

Purpose / Description of measure:

This measure tracks incident clearance time on Connecticut's state highway system. Incident duration is defined by CTDOT as the time elapsed from notification until all blocked travel lanes are open. Traffic Incident Management (TIM) is a planned and coordinated process to detect, respond to, and remove traffic incidents and restore traffic capacity as safely and quickly as possible. TIM involves a number of public and private sector partners, including law enforcement, fire and emergency medical services, towing and recovery, and others. TIM is an important tool in lessening the impact of non-recurring traffic congestion, as well as providing for a safer environment for drivers. The quicker an incident is removed, the sooner the highway system returns to normal capacity.

Discussion of trend:

The average incident duration (clearance) times in minutes are plotted in Figure 1. The average time for three jackknifed tractor trailer (JTT) truck incidents was slightly above the target at 3 hours and 31 minutes. For cars, the average of 39 minutes was within the target. The incident duration of the five overturned tractor trailer (OTT) trucks was also within target of 300 minutes. There are very few OTT trucks in a given quarter, and a single extended incident can easily skew the average time. (cont.)

Figure 1. Average Second Quarter Incident Clearance Times for Cars, Jackknifed TT Trucks and Overturned TT Trucks for 2006-2010

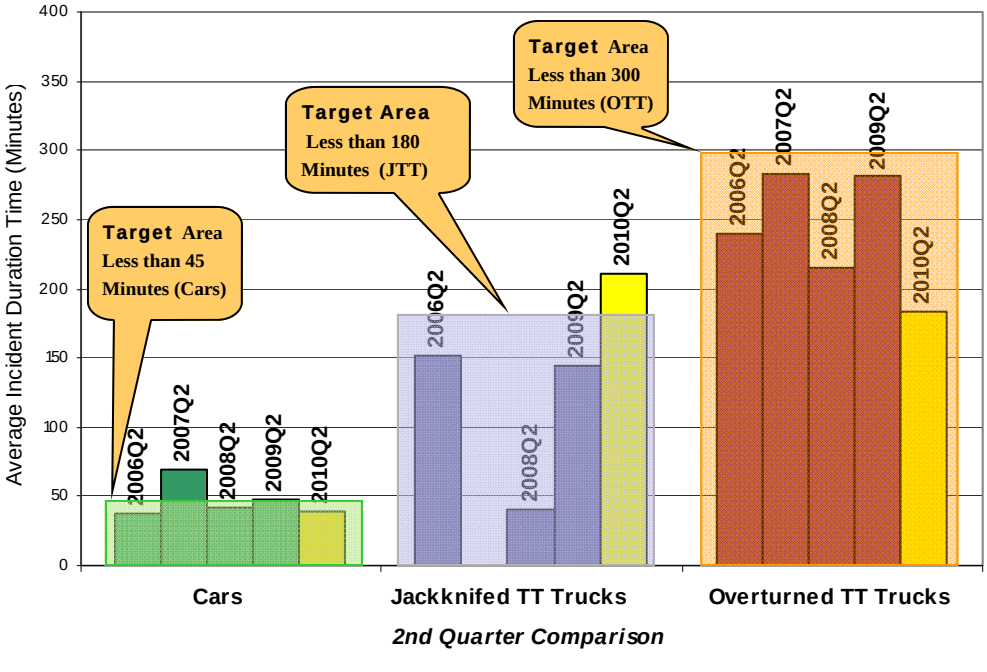
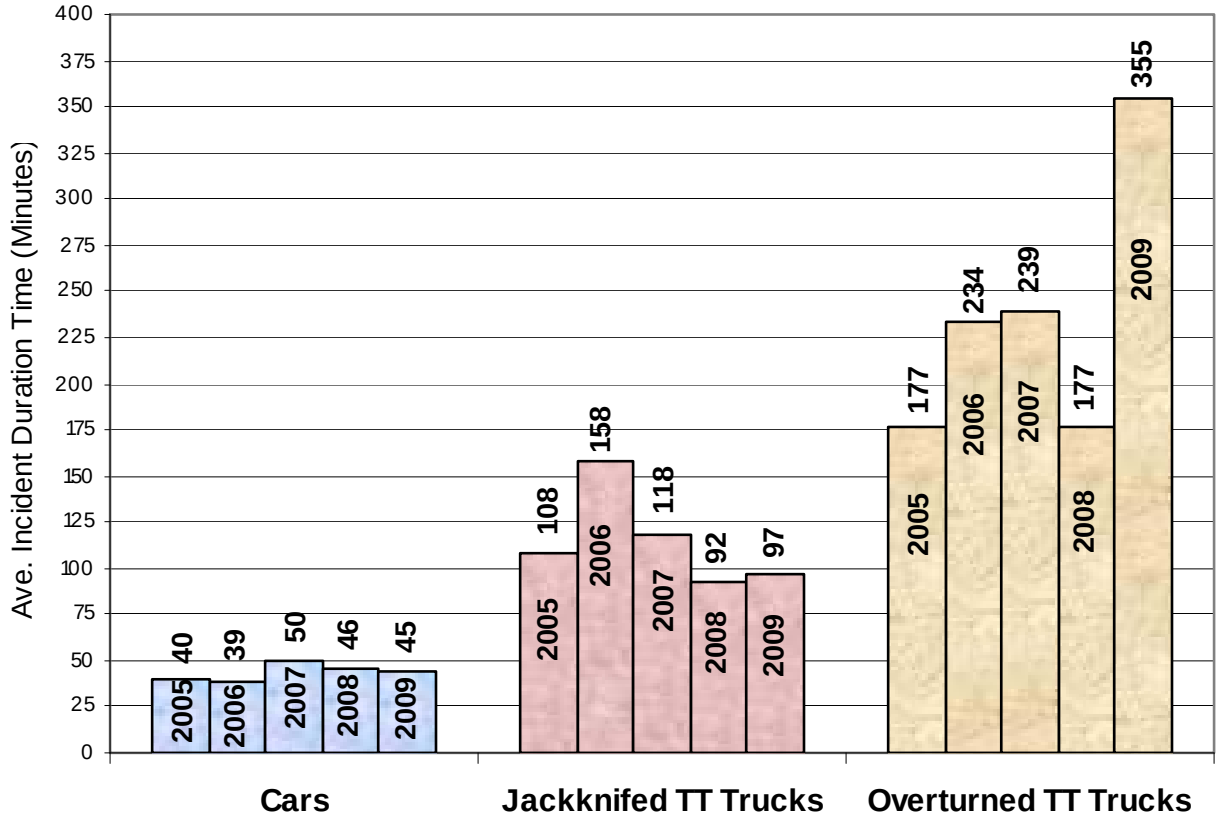


Figure 2 presents the average incident duration time in minutes for each full year 2005 through 2009. The same trends can be seen as in Figure 1: trucks on average require much longer clearance times than cars; and, a very significant variation in clearance times from year to year exists for overturned tractor trailer trucks due to the few number of incidents that occur, and that can vary significantly in magnitude.

Figure 2. Average Annual Incident Clearance Times for Cars, Jackknifed TT Trucks and Overturned TT Trucks, 2005 - 2009



Performance Measures

Objective:
Quality of Life

Program:
Congestion Management

Measure:
Average Highway Incident Response Time

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *3 minutes, 1 seconds (2010 Q2)*

Performance Target Value: *5 minutes or less*

Source: *Bureau of Highway Operations*
Mr. Harold Decker

Note: Data for this measure becomes available for reporting quarterly. The latest data set used for this posting covers the 2010 calendar year second quarter (4/1/2010 through 6/30/2010). Data is reported for all of I-95, and I-91 exits 1 through 15, only.

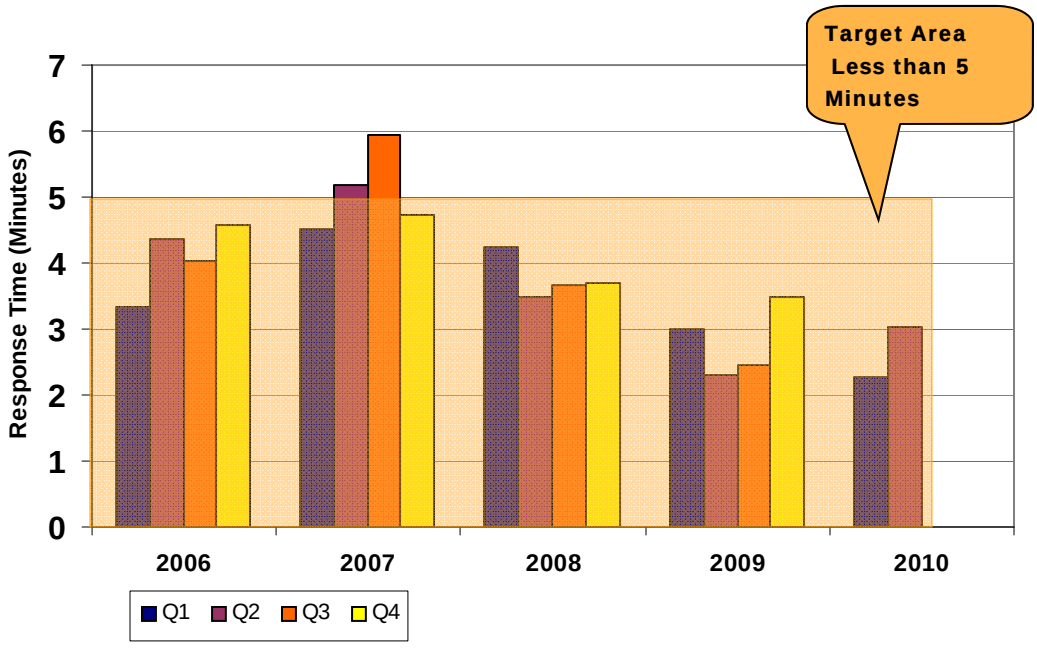
Purpose / Description of measure:

This measure tracks the response time for incidents on Connecticut's major highways. Average highway incident response time is defined as the time between State Police notification and the on-scene arrival of State Police personnel. Traffic Incident Management (TIM) is a planned and coordinated process to detect, respond to, and remove traffic incidents and restore traffic capacity as safely and quickly as possible. TIM involves a number of public and private sector partners, including law enforcement, fire and emergency medical services, public safety communications, towing and recovery, and others. TIM is an important tool in lessening the impact of non-recurring congestion, as well as providing for a safer environment for drivers. The quicker an incident is removed, the sooner the highway system returns to normal capacity.

Discussion of trend:

The average incident response time of 3 minutes, 1 second for the second quarter of 2010 is well within the target of less than 5 minutes.

Figure 1. Average Incident Response Time by Quarter for 2006-2010



Performance Measures

Objective:
Quality of Life

Program:
Mobility

Measure:
Percent of Funds Expended for Bicycle/Pedestrian Access

Report Date:
October 1, 2010

Data Frequency: Annual

Current Reported Value: *1.1 percent expended for pedestrian and bicycle access in State Fiscal Year (SFY) 2010*

Performance Target Value: *Expend at least one percent of total funds received, on facilities that improve bicycle and pedestrian access*

Source: *Bureau of Engineering and Construction*
Mr. Rabih Barakat, P.E.

Note: Data for this measure becomes available for reporting annually in October for the previous State Fiscal Year (SFY). The data set used for this posting covers SFY 2010 (7/1/2009 through 6/30/2010), and includes state and municipal projects.

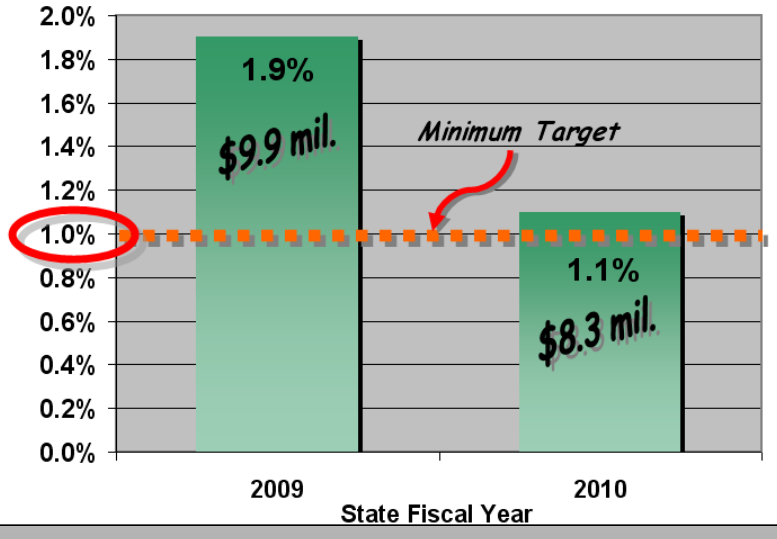
Purpose/Description of measure:

This measure tracks the percent and total amount of dollars spent and/or programmed to be spent, on projects containing items that improve accessibility for pedestrians and bicyclists. Walking and bicycling promote good health, cost less than driving a motor vehicle, are good for the environment, provide freedom of travel and independence, and add to the sense of community in a town or city. In an effort to meet the public's demand for improved mobility and a better quality of life, CTDOT supports the use of bicycling and walking, and places emphasis on providing a safe and convenient environment for these transportation modes.

Discussion of trend:

Public Act 09-154, passed by the Connecticut General Assembly (CGA) in 2009, requires "a reasonable amount of any funds received by CTDOT or any municipality for construction, restoration, rehabilitation, or relocation of roads to be spent for facilities for all users, including at least, bikeways and sidewalks with curb cuts and ramps." This year the Department again exceeded the 1 percent target set by the CGA (Figure 1). CTDOT identified 42 projects awarded in SFY2010 that include elements for pedestrians or bicyclists, such as sidewalks, audible pedestrian signals, push buttons, signs, pedestrian/bicycle trails, and ramps. Total dollars being expended for these items equals $8.3 million, which was approximately 1.1 percent of total funds awarded for the construction, maintenance and repair of roads in the state.

Figure 1. Percent of Funds Expended for Bicycle / Pedestrian Access (SFY2009 & 2010)



Performance Measures

Objective:
Accountability & Transparency

Program:
Administration

Measure:
Percent of Agreements Executed in Under 60 Days

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *48% — SFY 2010 Q4 (CY 2010 Q2)*
47% — SFY 2010

Performance Target Value: *Increase the percentage of agreements executed in under 60 days*

Source: *Bureau of Finance & Administration*
Mr. Mark Daley

Note: Data for this measure becomes available for reporting quarterly based on state fiscal year (July 1 through June 30). The latest data set used for this posting covers the time period from April 1, 2010 through June 30, 2010, which is quarter 4 of State Fiscal Year (SFY) 2010 and quarter 2 of Calendar Year (CY) 2010.

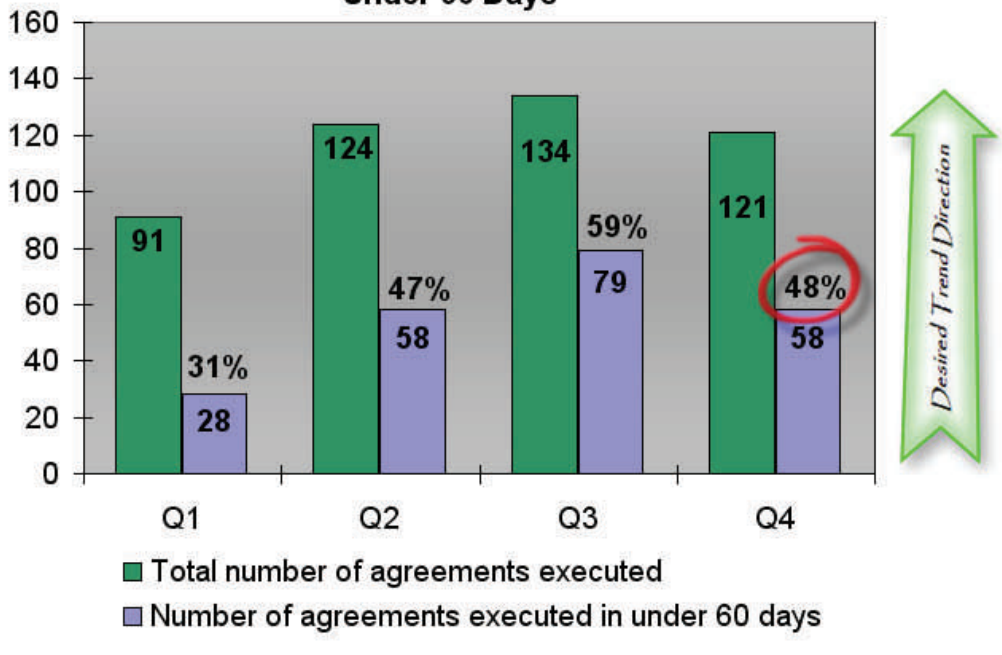
Purpose/Description of measure:

This measure tracks the improvement in the processing and execution of various types of agreements that the Department enters into. CTDOT executes a large number of agreements annually including: consultant agreements for architectural, engineering, planning, surveying; force account; local bridge; municipal design and construction; maintenance encroachment; traffic signals and railroad grade crossings; rights of way; utilities; rail leases; public transportation operating; grants; ground transportation; air carriers; concession license, etc. The time it takes to execute an agreement is critical to project schedules, funding, project costs and convenience to the traveling public.

Discussion of trend:

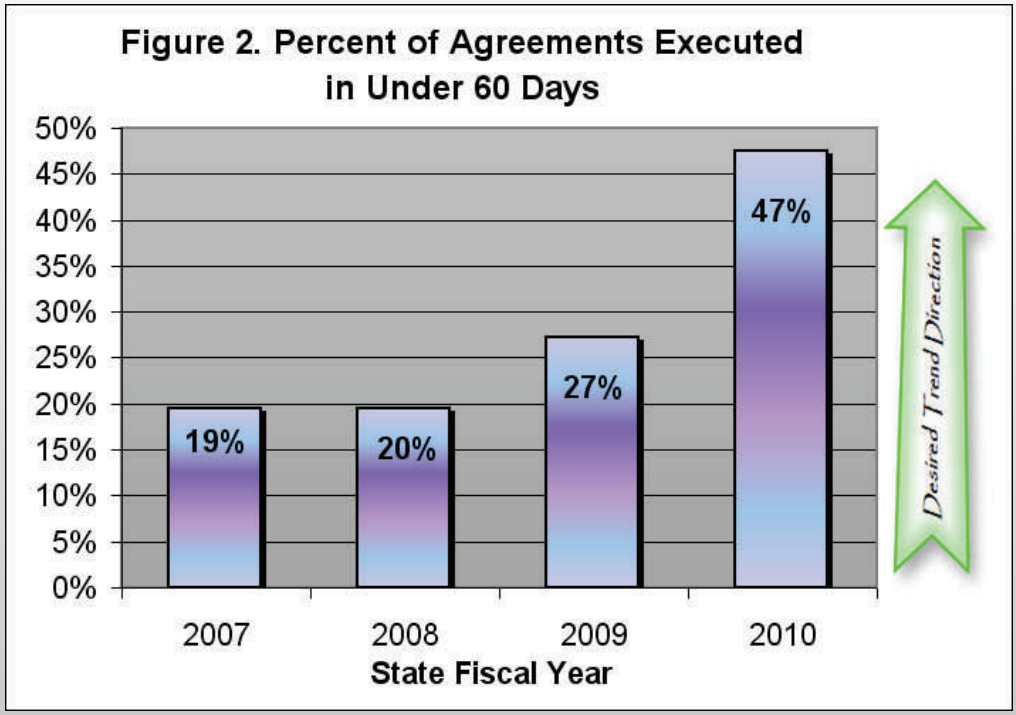
The trend for the percentage of agreements executed in under sixty 60 days dropped slightly in the fourth quarter of SFY 2010. This quarter, 48 percent of agreements were executed in under 60 days, down from 59 percent in the third quarter (Figure 1).
(cont.)

Figure 1. SFY 2010 Total Number of Agreements Executed and Number and Percent Executed in Under 60 Days



(cont.) Discussion of trend:

In SFY 2010, the Department has executed 221 out of 464 total agreements or 47 percent in under 60 days. This is a significant improvement over previous years and is in part related to the use of the boiler plate agreement template instituted in the fourth quarter of SFY 2009, which enables certain agreements to be executed within a two week timeframe. Figure 2 below shows that the goal to increase the percent of agreements executed in under 60 days is being met.



Performance Measures

Objective:
Accountability & Transparency

Program:
Project Delivery

Measure:
Percent of Construction Contracts Awarded within 60 Days of Bid Opening

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *86% — SFY 2010 Q4 (CY 2010 Q2)*
86% — SFY 2010 Year to date

Performance Target Value: *100% of construction contracts awarded within 60 days of bid opening*

Source: *Bureau of Finance & Administration*
Mr. Mark Daley

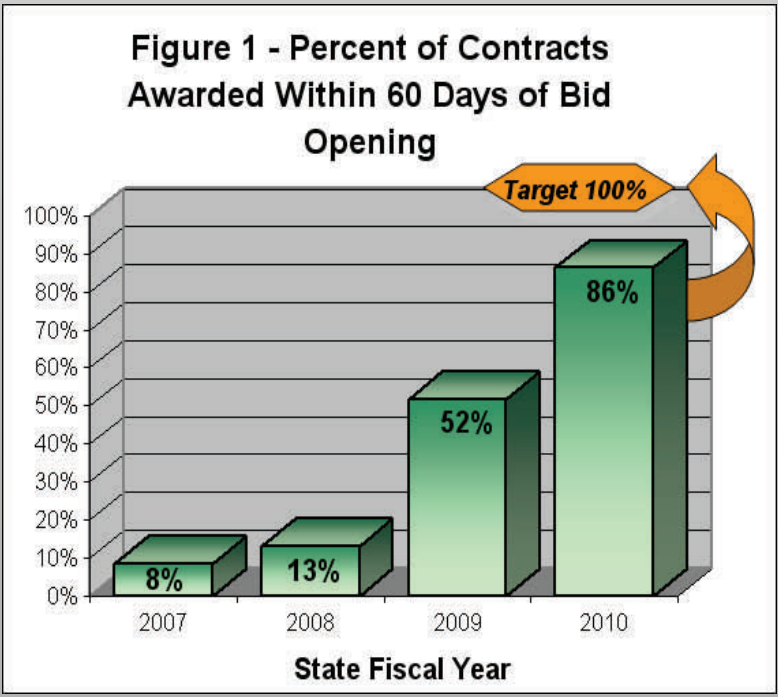
Note: Data for this measure becomes available for reporting quarterly based on State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting covers the time period from April 1, 2010 through June 30, 2010, which is quarter 4 of SFY 2010 and quarter 2 of calendar year (CY) 2010.

Purpose/Description of measure:

This measure tracks the progress of awarding construction contracts once the bids have been received. The Department of Transportation executes a significant number of construction contracts annually with an approximate average value of $385 million. These contracts involve the construction of roads, bridges, buildings, transportation-related public works projects, demolition, or other transportation-related matters. The timely execution of contracts is critical not only to ensure a safe and efficient infrastructure for the traveling public but also to disburse funds quickly and minimize overall project costs.

Discussion of trend:

The trend for Contracts Awarded within sixty (60) days of the bid opening remained steady for State Fiscal Year (SFY) 2010. In the fourth and final quarter of SFY 2010, 19 out of 22 or 86 percent of construction projects were awarded within 60 days of the bid opening, which kept the year to date (YTD) average at 86 percent (Figure 1). This is a significant increase from SFY 2007 where only 8 percent of construction contracts were awarded within sixty (60) days of the bid opening. It should be noted that this quarter there were about twice as many construction contracts awarded compared to previous quarters. Many factors, including various process refinements and timely funding approvals, contributed to reduce the number of days it takes to award a contract.



Performance Measures

Objective:
Accountability & Transparency

Program:
Federal Aid Projects

Measure:
Number of Project Closeouts

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *31 — SFY 2010 Q4 (CY 2010 Q2)*
286 — SFY 2010 Year to date

Performance Target Value: *250 projects closed in State Fiscal Year (SFY) 2010*

Source: *Bureau of Finance & Administration*
Mr. Robert Card

Note: Data for this measure becomes available for reporting quarterly based on the State Fiscal Year (SFY) (July 1 through June 30). The latest data set used for this posting covers the time period from April 1, 2010 through June 30, 2010, which is quarter 4 of SFY 2010 and quarter 2 of calendar year (CY) 2010.

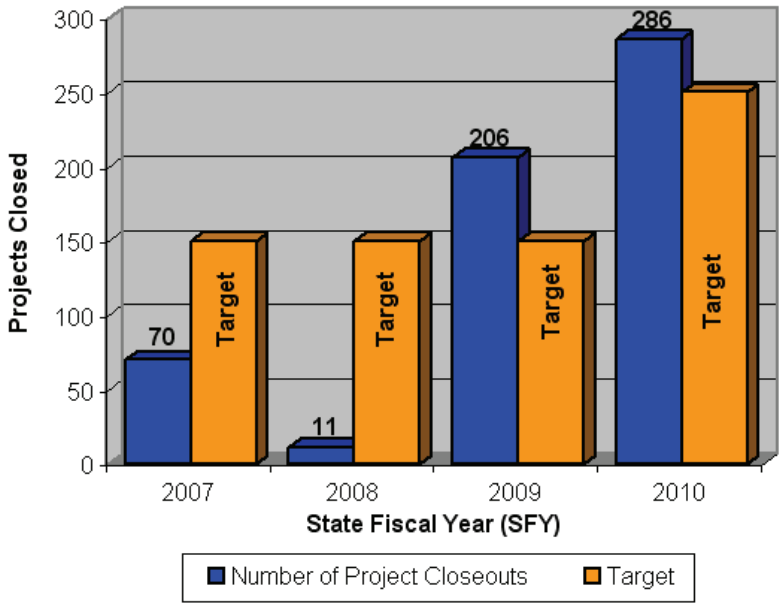
Purpose/Description of measure:

This measure tracks the progress made on the project closeout of Federal Highway Administration (FHWA) funded projects. The Department seeks to closeout projects and release unused state and federal funding for obligation on new projects. When projects are requested for closeout by project managers, they are put on an assignment list for project closeout and final voucher. With the transition to the State's new financial management system (Core-CT) and the implementation of a new federal billing system, the Department was unable to closeout FHWA funded projects efficiently for several years. In the beginning of October 2008 a project closeout team was formed with representatives from the Department's operational areas and FHWA. At that time a review was performed, which identified 1,212 projects that were candidates for closeout. The Department also initiates approximately 200 new projects per year. The goal is, with experience and an appropriate amount of resources, the Department will begin to closeout more projects than are initiated in a year.

Discussion of trend:

The Department is moving forward and making significant progress with the Project Closeout and Final Voucher initiative. In the fourth quarter of SFY 2010, 31 projects have been closed bringing the total for SFY 2010 to 286 (Figure 1). The goal of closing 250 projects by the close of SFY 2010 has been reached and we continued to close projects. For SFY 2011 the goal will be increased to 300. Currently the number of projects that are candidates for closeout is approximately 850 and has dropped by over 400 projects since the start of the initiative back in October 2008. We have over 100 Final Vouchers prepared and going through the closeout process.

Figure 1. Number of Project Closeouts by State Fiscal Year (July 1 to June 30)



Performance Measures

Objective:
Accountability & Transparency

Program:
Economic Revival

Measure:
CT RECOVERY
Percent Funds Obligated

Report Date:
April 1, 2010

Data Frequency: Quarterly

Current Reported Value: *Highways— 100% (March 5, 2010)*
Transit— 100% (March 5, 2010)

Performance Target Value: *Highways—50% by July 1, 2009*
100% by March 2, 2010
Transit—50% by September 1, 2009
100% by March 5, 2010

Source: *Office of Commissioner*
Mr. Philip Scarrozzo

Note: Data for this measure becomes available monthly. The data set used for this posting is cumulative for the time period June 1, 2009 through March 5, 2010.

Purpose/Description of measure:

This measure tracks the progress CTDOT is making in obligating American Recovery and Reinvestment Act (ARRA) 2009 dollars for transportation projects. An obligation is the Federal government's legal commitment to pay or reimburse the State for the Federal share (in this case 100 percent) of the eligible costs. ARRA regulations required that at least fifty percent of the allocated dollars for highways, bridges and enhancements be obligated by July 1, 2009, and fifty percent of transit funds be obligated by September 1, 2009. One hundred percent of the allocated dollars must be obligated for these programs by March 2, 2010 and March 5, 2010, respectively. Amounts not obligated by the above targets could be taken away from Connecticut and awarded to other states. Additional information on CTDOT Recovery projects can be accessed on the website at www.ct.gov/dot by clicking on the CTRecovery icon.

Discussion of trend:

As of March 5, 2010 all of the ARRA stimulus funds have been obligated in Connecticut for all four program categories. The funding breakdown is shown in Figure 1. This represents 100 percent of the $455-million ARRA funds allocated to Connecticut for transportation infrastructure (excluding discretionary ARRA funds).

(Continued)

Figure 1. Funds Obligated (in Millions of Dollars) for Roads and Bridges, Transit and Rail, Enhancements and Regional Planning Agencies (Municipalities) in Connecticut, as of March 5, 2010

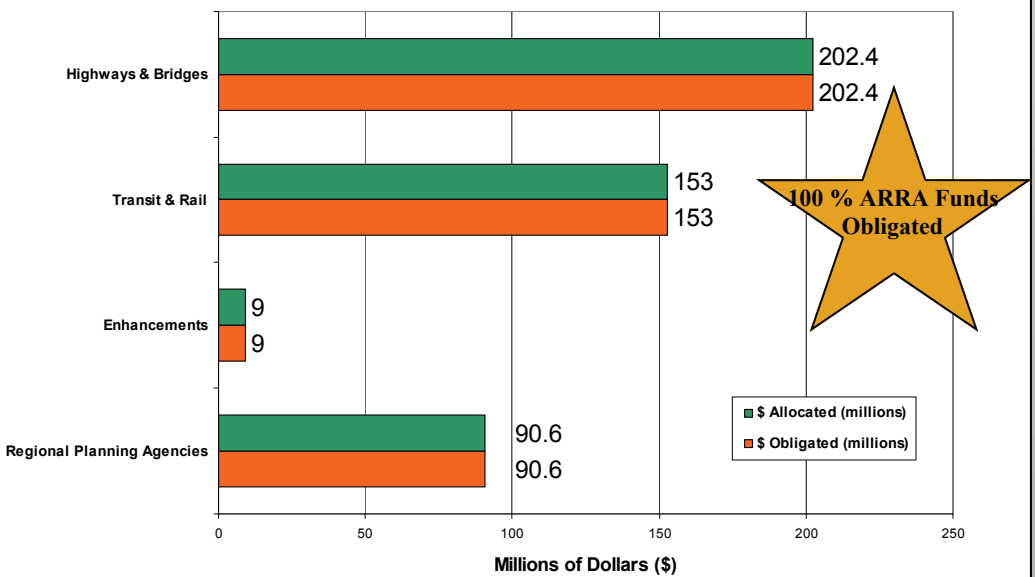
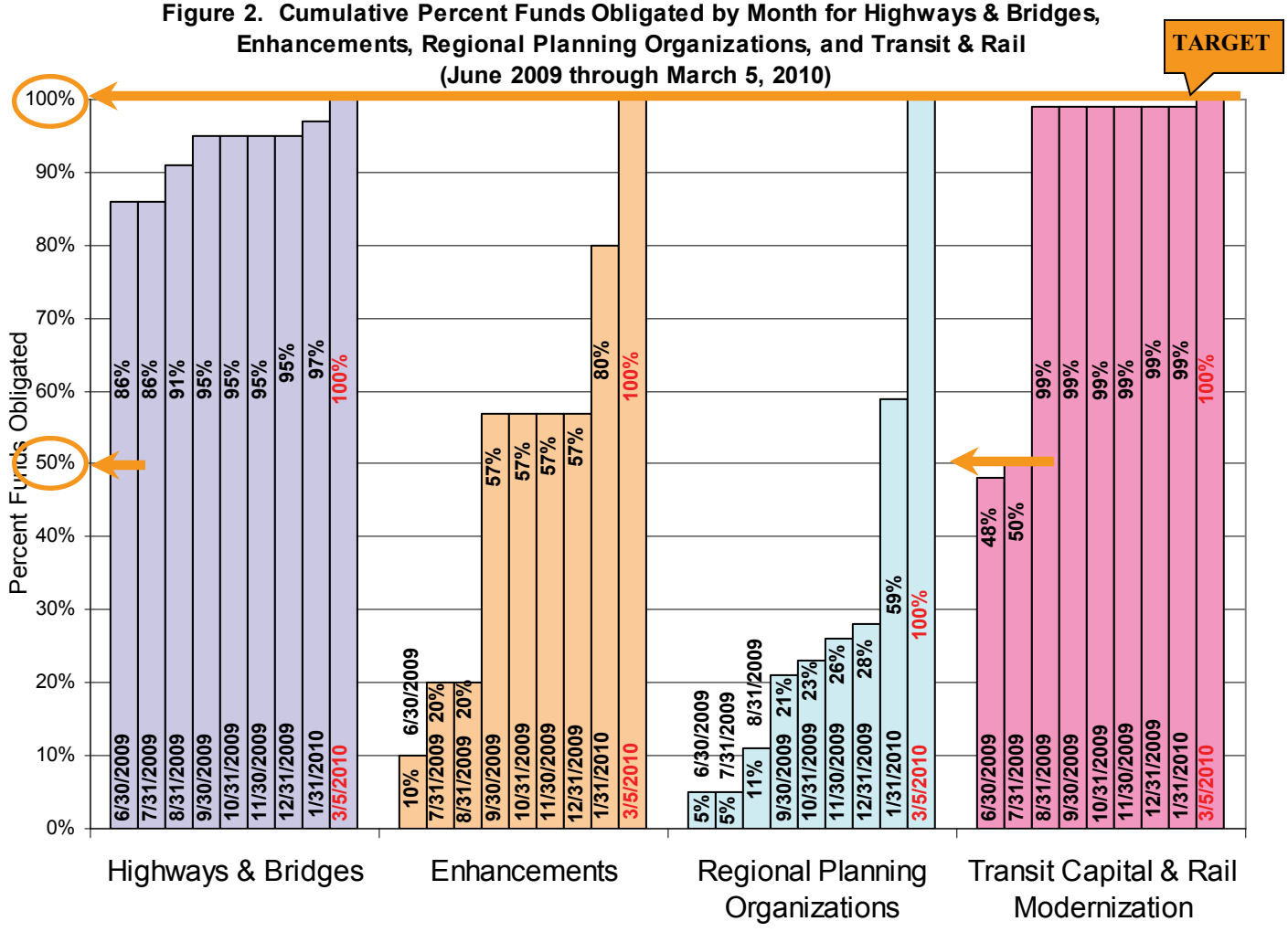


Figure 2 below illustrates the cumulative percent funds obligated for each ARRA program category during the past nine months. Eighty-six percent of the highway project funds were obligated by June 30th, and 98 percent of transit funds by August 31st. These amounts surpassed the interim targets. As of March 5, 2010, 100 percent of funds for highways/bridges, transit/rail, enhancements and regional planning organizations projects in Connecticut have been obligated. The 100 percent obligation target deadlines in March 2010 have been met. This ensures that none of the ARRA funds can be withdrawn and redistributed to other states.

Figure 2. Cumulative Percent Funds Obligated by Month for Highways & Bridges, Enhancements, Regional Planning Organizations, and Transit & Rail (June 2009 through March 5, 2010)



Performance Measures

Objective: ***Accountability & Transparency***

Program: ***Economic Revival***

Measure:

Percent Dollars Expended

Report Date: **October 1, 2010**

Data Frequency: Quarterly

Current Reported Value: *$122,091,717 (26.8 Percent)*

Performance Target Value: *$455 million (100 Percent)*

Source: *Office of Commissioner*
Mr. Phil Scarrozzo

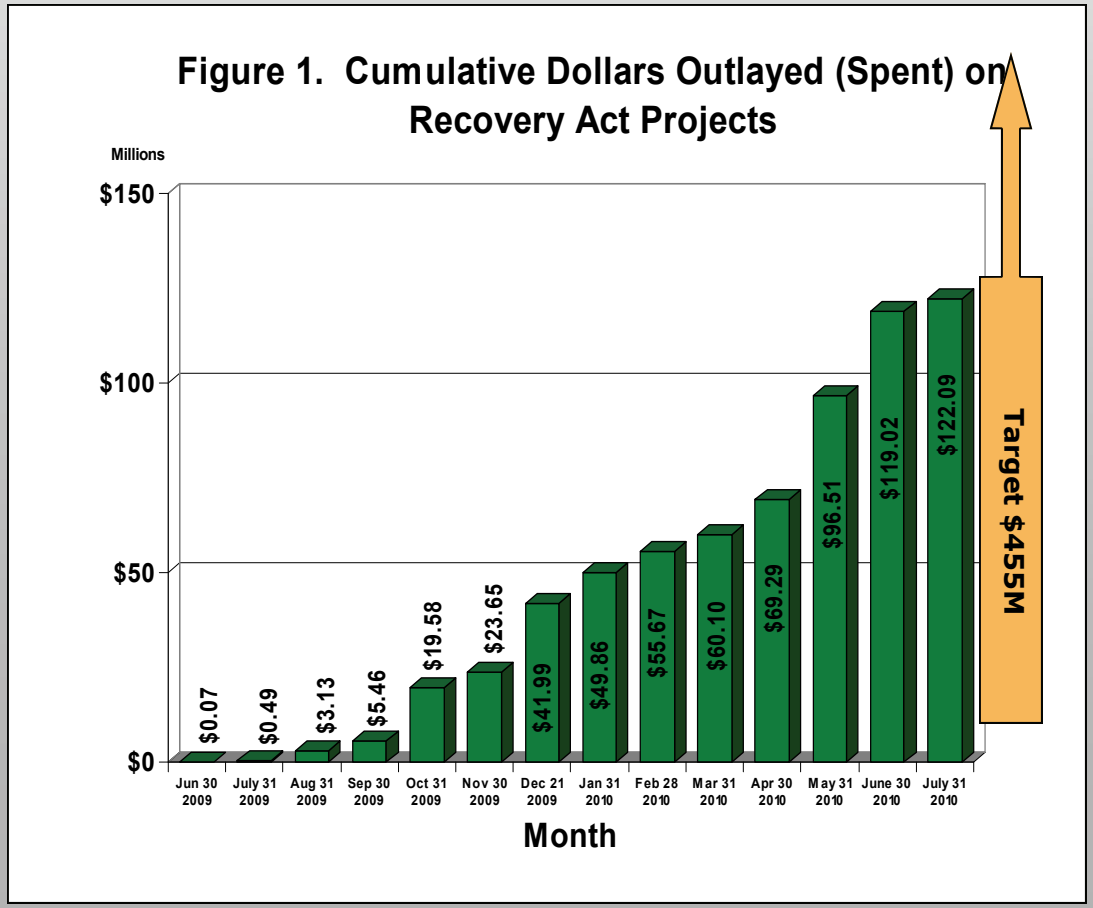
Note: Data for this measure becomes available monthly. The data set used for this posting covers the time period from June 1, 2009 through July 31, 2010.

Purpose/Description of measure:

This measure tracks the progress being made in spending American Recovery and Reinvestment Act (ARRA) 2009 project dollars. This measure includes ARRA dollars spent on highways, bridges, transit, rail, and enhancements on CTDOT and Regional Planning Agency projects. Additional information on CTDOT Recovery projects can be accessed on the website at www.ct.gov/dot by clicking on the CTRecovery icon.

Discussion of trend:

As of July 31, 2010 more than $122 million dollars have been expended in Connecticut on 141 projects that have been awarded to-date. In order to utilize the full $455 million allocated to Connecticut all funds must be expended by early 2014.



Performance Measures

Objective:
Accountability & Transparency

Program:
Economic Revival

Measure:
CT RECOVERY
Number of Jobs Created/Sustained

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *16,158 Jobs Created/Sustained*

Performance Target Value: *Increase Jobs Created/Sustained*

Source: *Office of Commissioner*
Mr. Philip Scarrozzo

PUTTING AMERICA TO WORK
PROJECT FUNDED BY THE
American Recovery and Reinvestment Act
USDOT TIGER

Note: Data for this measure becomes available monthly. The data set used for this posting covers the time period from June 1, 2009 through July 31, 2010.

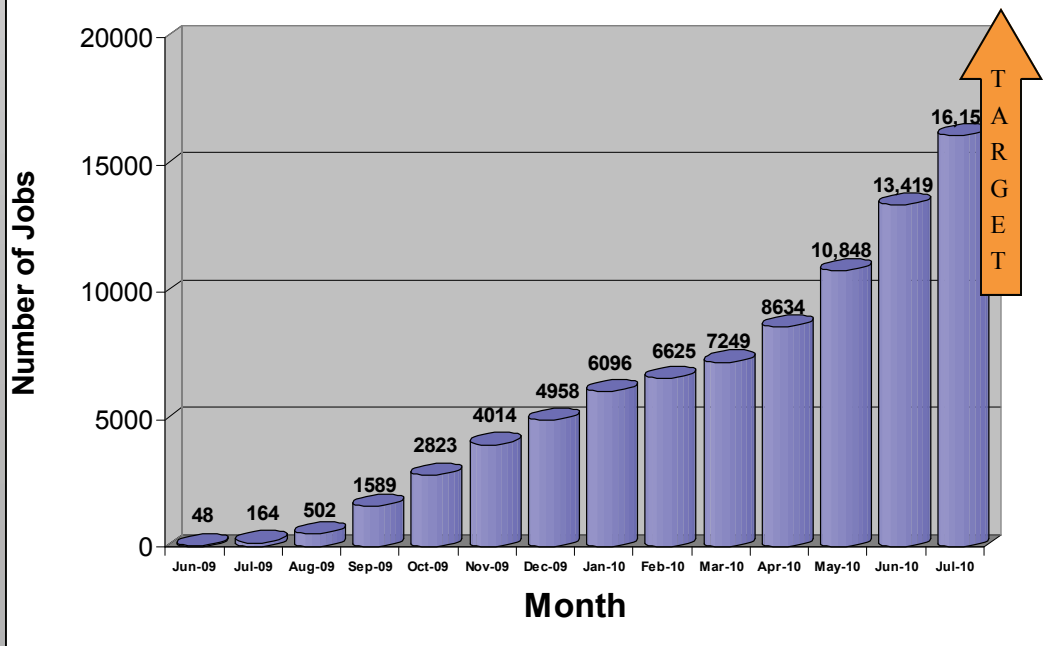
Purpose/Description of measure:

This measure tracks the number of jobs created and/or sustained in Connecticut on transportation projects as a direct result of the American Reinvestment and Recovery Act (ARRA) 2009. This measure includes jobs created/sustained with ARRA dollars spent on highways, bridges, transit, rail, and enhancements on CTDOT and Regional Planning Agency projects. This listing is for direct jobs only, and does not include indirect jobs created as a result of material manufacturing and delivery to projects, or jobs that may be created in the local economy as a result of ARRA project employed workers. The statistics for number of jobs created/sustained are supplied by the contractors who employ the workers on active projects. Additional information on CTDOT Recovery projects can be accessed on the website at www.ct.gov/dot by clicking on the CTRecovery icon.

Discussion of trend:

As of July 31, 2010 16,158 jobs have been created or sustained in Connecticut on ARRA funded projects. This also represents 539,831 total job hours created or sustained at a payroll of $21,085,922 for the job hours created/sustained with Recovery Act funds. The numbers reported in Figure 1 have not been converted to Full-Time Equivalent positions.

Figure 1. Cumulative Number of Direct On-Project Jobs Created/Sustained by Recovery Act Funds



Performance Measures

Objective:
Accountability & Transparency

Program:
Economic Revival

Measure:

Percent of CTDOT Stimulus Projects Completed On-Time

Report Date:
October 1, 2010

Data Frequency: Quarterly

Current Reported Value: *93 Percent Completed On-Time (15 Projects Completed by July 31, 2010)*

Performance Target Value: *Maximize Percent of Stimulus Projects Completed On-Time*

Source: *Office of Commissioner Mr. Philip Scarrozzo*

Note: Data for this measure becomes available monthly. The latest data set used for this posting covers the time period October 1, 2009 through July 31, 2010.

Purpose/Description of measure:

This measure tracks the percent of CTDOT American Recovery and Reinvestment Act (ARRA) 2009 projects that are completed before, or within 30 days beyond, the original scheduled contract completion date. Excluding ARRA projects sub-allocated to regional planning agencies, there are 68 projects being tracked. These include projects for highways, bridges, enhancements, transit and rail. Only projects funded from the original ARRA allocation are included here. Additional information on all CTDOT Recovery projects can be accessed on the website at www.ct.gov/dot .

Discussion of trend:

On-time completion of projects indicates how well CTDOT adheres to project schedules. Some project delays are inevitable, as unexpected events or unforeseen work can be encountered once a project is started that are outside the control of CTDOT, or were impossible to predict in advance. Under these circumstances the anticipated scheduled completion dates are extended to the future. The data presented in Table 1 is based on the actual completion date compared to the original scheduled completion date, plus a thirty day allowance. Reporting in this manner stresses the importance of making every effort to anticipate unforeseen issues during the design of a project. Fifteen ARRA projects have been completed to date. Fourteen were completed within thirty days of the original scheduled end date.

Table 1. Status of CTDOT Stimulus Projects (as of February 28, 2010)	
Total Number of Projects	68
# of Projects Awarded to Date	55
# of Projects Currently Active	40
# of Projects Completed to Date	15
Percent of Projects Completed to Date that Were On-time	93% (14 of 15)
# of Projects that are Currently Projected to Finish Late	6

Performance Measures

Objective: **Accountability & Transparency**

Program: **Construction Project Delivery**

Measure:

Percent of Construction Contracts Completed Within Budget

Report Date: **October 1, 2010**

Data Frequency: Quarterly

Current Reported Value: *69% of construction contracts completed within budget*

Performance Target Value: *Maximize percent of construction contracts completed within budget*

Source: *Bureau of Engineering and Construction*
Mr. James P. Connery, P.E.

Note: Data for this measure becomes available for reporting quarterly based on calendar year. The latest data set used for this posting covers the time period from 4/1/2010 through 6/30/2010.

Purpose / Description of measure:

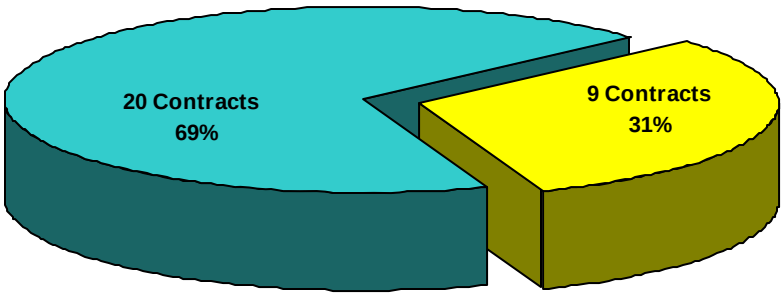
This measure compares the cost of completed projects with the original contract budget. The original contract budget is defined as the awarded original contract value plus 10% contingency. Projects are accepted when all construction work has been satisfactorily completed, and all required documentation has been submitted and approved. There were twenty-nine (29) contracts completed during this quarter. These include contracts for Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Federal Aviation Administration (FAA) construction projects.

Discussion of trend:

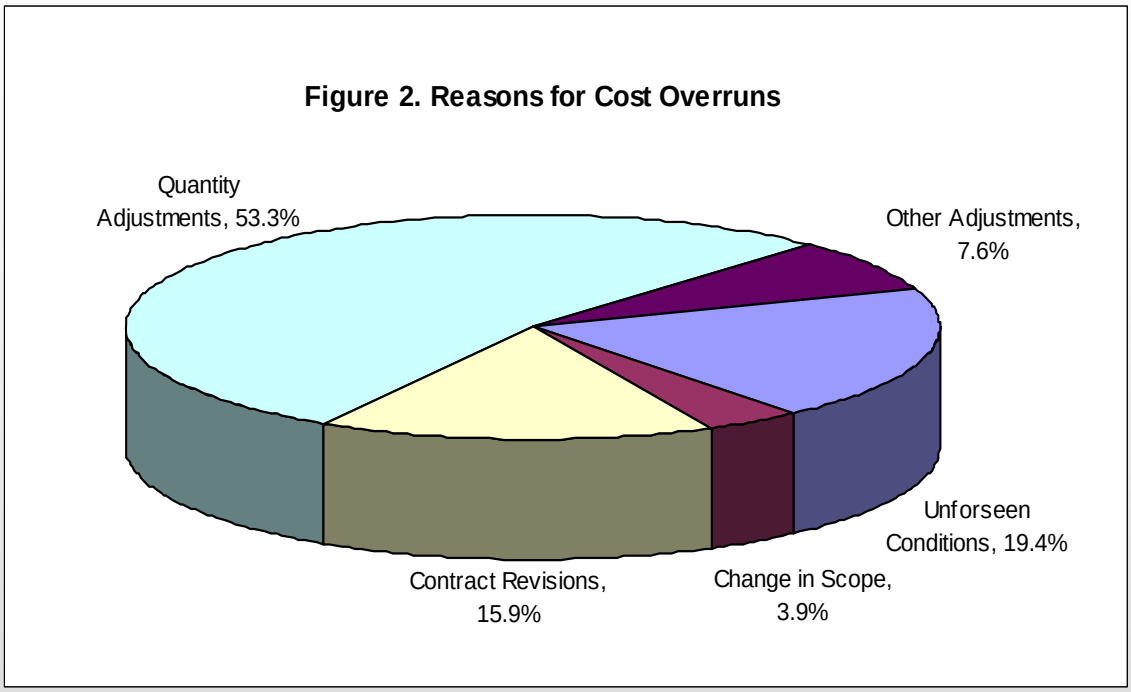
Sixty-nine percent (69%) of the contracts completed during the 2nd Quarter of 2010 were within budget (Figure 1). This represents twenty (20) of the twenty-nine (29) contracts. The trend analysis for the contracts cost overrun indicates that: 19.4% is due to Unforeseen Conditions; 3.9% is due to Change in Scope; 15.9% is due to Contract Revisions; 53.3% is due to Quantity Adjustments; and 7.6% is due to Other Adjustments (Figure 2). Other Adjustments include Incentives/ Disincentives, Liquidated Damages, Material Adjustments, R.O.W., etc.. The Department efforts to minimize cost overruns on contracts, include being proactive in design phase reviews to address constructability issues, encourage contractor's innovative ideas and value engineering.

(continued)

Figure 1. Construction Contracts Completed During Second Quarter of 2010



Discussion of trend: (continued)



Change Order Reasons-Definitions:

Unforeseen Condition – Additional work necessitated by encountering reasonably unforeseeable conditions which differ materially from those indicated in the contract, or unusual conditions differing from those normally encountered.

Change in Scope – Changes from the original intent or purpose of the project, extension of projects limits, elimination of contract work, and work not normally associated with the type of work originally bid.

Contract Revision – Changes in the original design initiated by design or construction which fall within the original scope of the project and do not alter the basic character of the project.

Quantity Adjustments – Minor increases or decreases less than 10% of the original quantities, and the value is less than $5000.00, which are not attributable to any of the above explanations.

Other Adjustments – Revisions to the contract or plans to correct foreseeable changes which reasonably could have been expected, such as work shown on the plans for which no pay item was provided, contract revisions to comply with Environmental permits or Rights of Way agreements, and an elevation bust resulting in extra work to correct.

Performance Measures

Objective: **Accountability & Transparency**

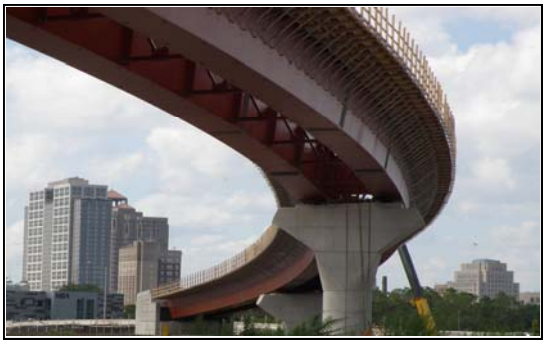
Program: **Construction Projects Delivery**

Measure:

Percent of Construction Contracts Completed On Time

Report Date: **October 1, 2010**

Data Frequency: Quarterly



Current Reported Value: *45% of construction contracts completed on time*

Performance Target Value: *Maximize percent of construction contracts completed on time*

Source: *Bureau of Engineering and Construction*
Mr. James P. Connery, P.E.

Note: Data for this measure becomes available quarterly. The latest data set used for this posting covers the calendar year second quarter from 4/1/2010 through 6/30/2010.

Purpose / Description of measure:

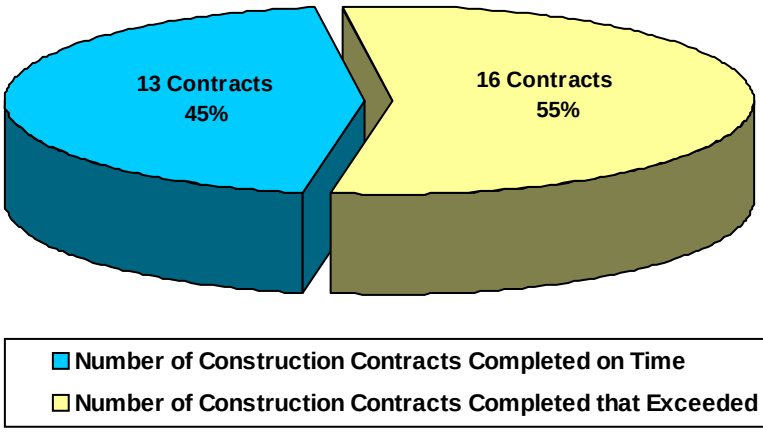
This measure tracks the percentage of CTDOT Construction contracts that were completed on time, which is defined as time within 100 percent of the original scheduled duration in calendar days, as specified in the contract. There were twenty-nine (29) contracts completed during this quarter. These include contracts for Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Federal Aviation Administration (FAA) construction projects.

Discussion of trend:

As shown in Figure 1, during the 2nd Quarter of 2010, CTDOT completed a total of twenty-nine (29) contracts, and forty- five percent (45%) of those contracts were on time. CTDOT efforts to reduce time overruns on contracts include: improve coordination of contract activities; improve utility relocation efforts; improve communication with various stakeholders; closely monitor performance of construction activities and address issues in a timely manner.

(Continued)

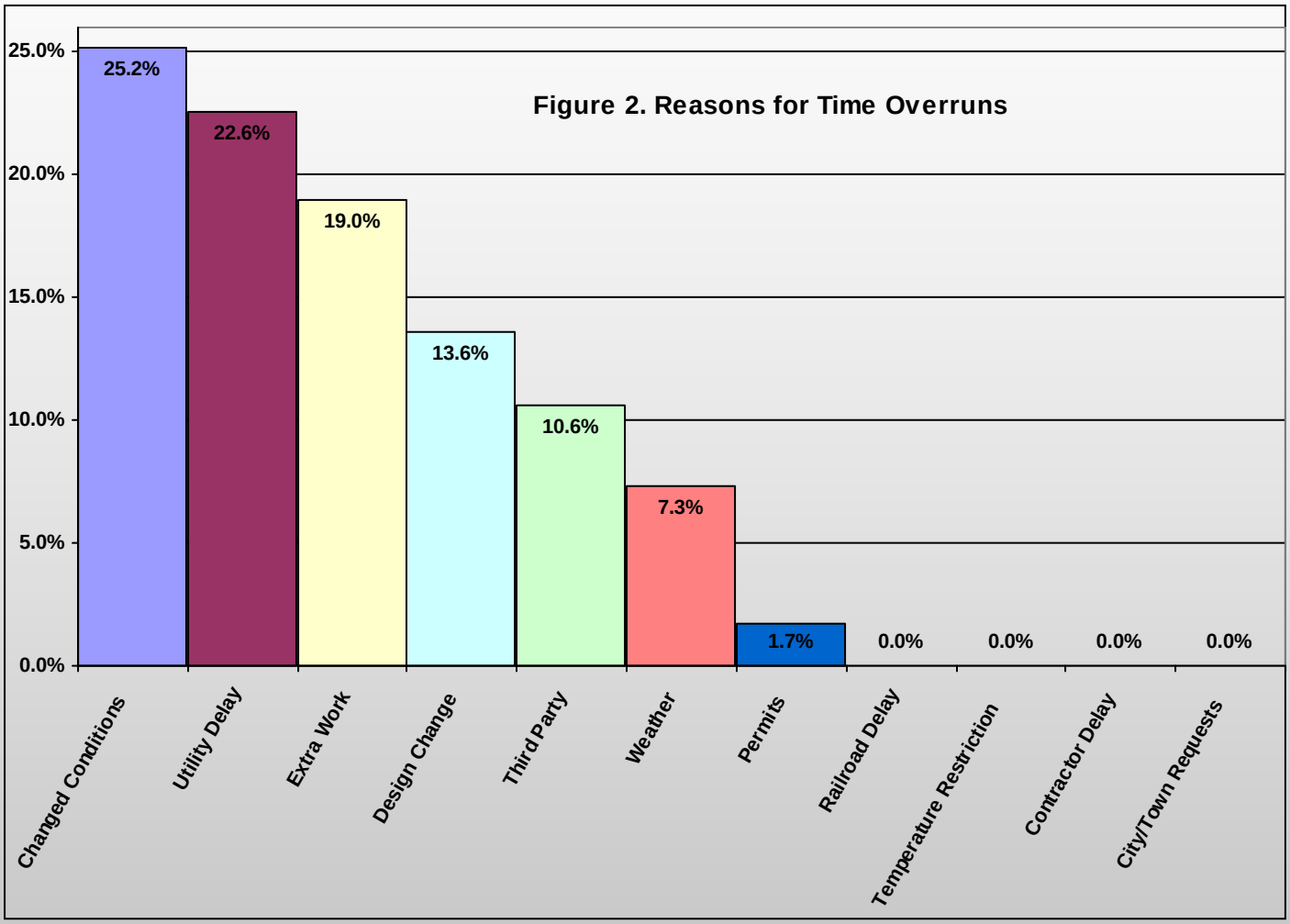
Figure 1. Construction Contracts Completed During Second Quarter of 2010



* Time extensions may be approved for the completion of extra or added work or delays resulting from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, except for weather or seasonal conditions.

Discussion of trend: (continued)

Figure 2 illustrates the reasons for the time overruns.



Time Extension Reasons-Definitions:

Changed Conditions- Delays caused by subsurface or latent field conditions that could not have been known before construction, or unusual underground soil conditions.
Utility Delay- Construction delayed waiting for utility companies to move their facilities.
Extra Work- Additional work made necessary by Engineer's changes of the Contract plans or specifications, which was not contemplated in the original contract work.
Design Change- Foreseeable work that was either the result of a defect in the original design or not included in the contract.
Third Party- Any delay caused by the actions of a third party not more specifically defined in any other category, such as an owner of adjacent property, manufacturers, suppliers.
Weather- Delays due to allowed work that cannot be completed due to period of unusual weather.
Permits- Construction delays due to time required to modify or issue a permit such as Army Corp., DEP, United States Coast Guard, local Conservation Commission, etc.
Railroad Delay- Delays caused by railroad companies.
Temperature Restriction- Delays due to restriction for temperature sensitive materials.
Contractor Delay- Delays caused solely by the Contractor.
City/Town Requests- Requests made by a municipality during construction for work not included in the contract.